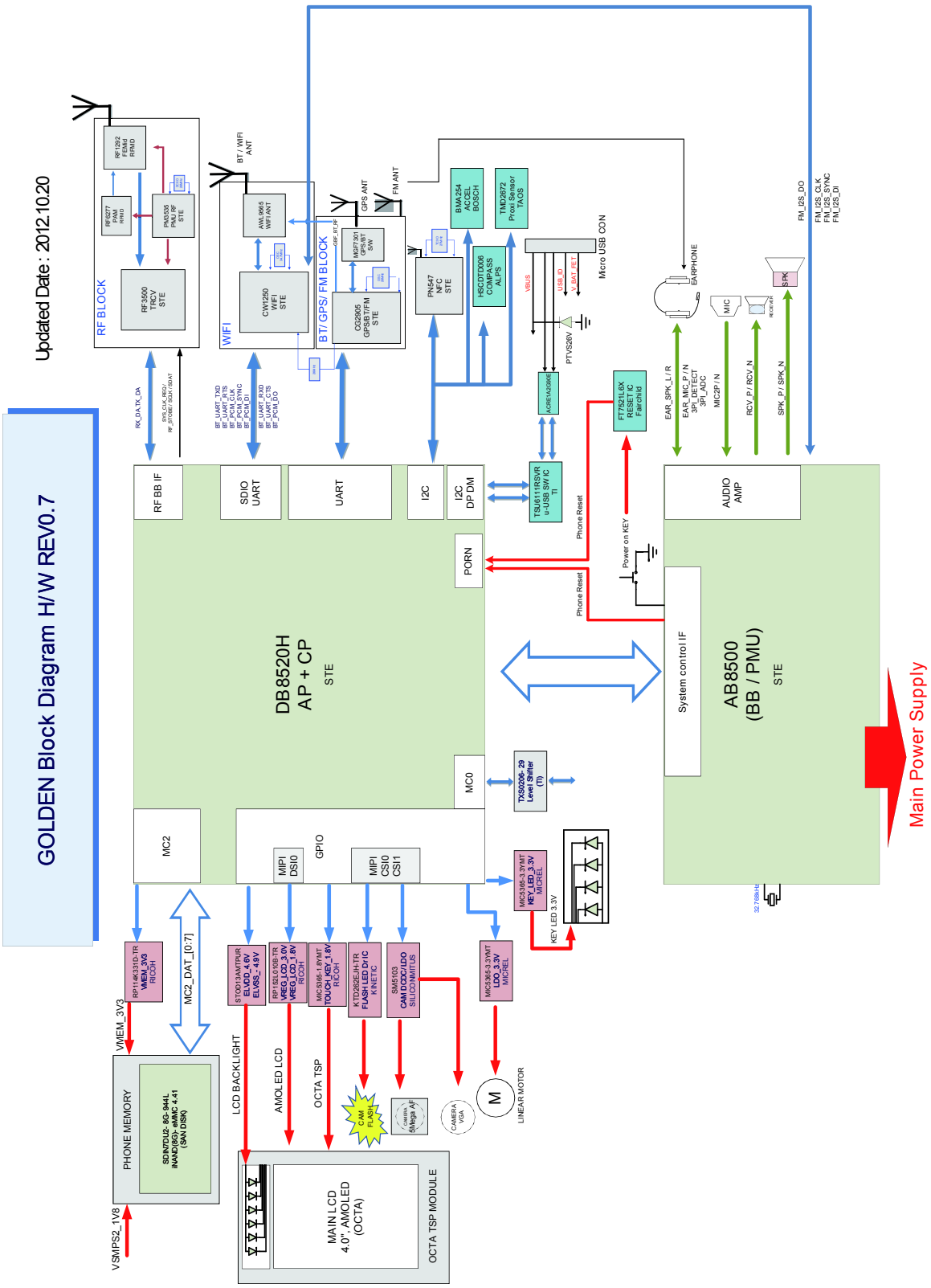
8. Level 3 Repair

8-1. Block Diagram



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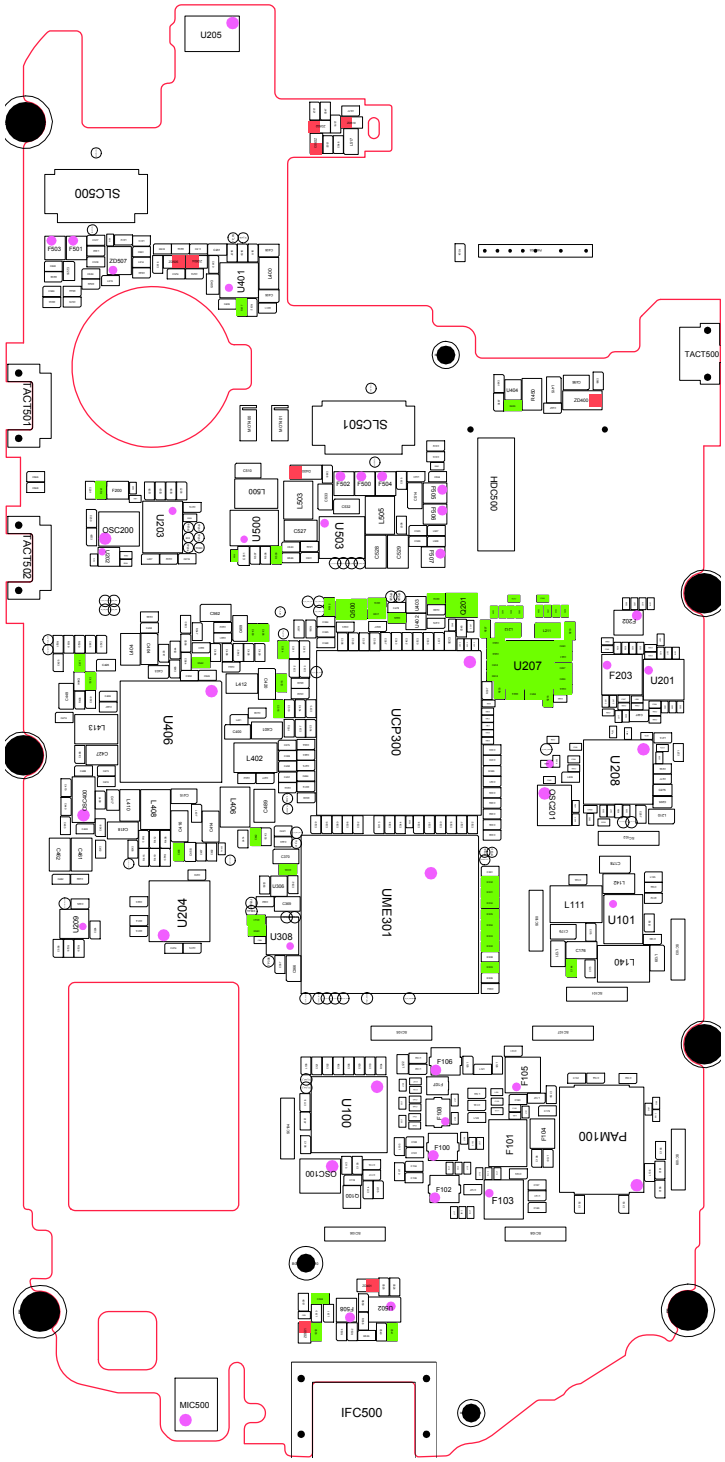
8-2. PCB Diagrams

8-2-1. Top



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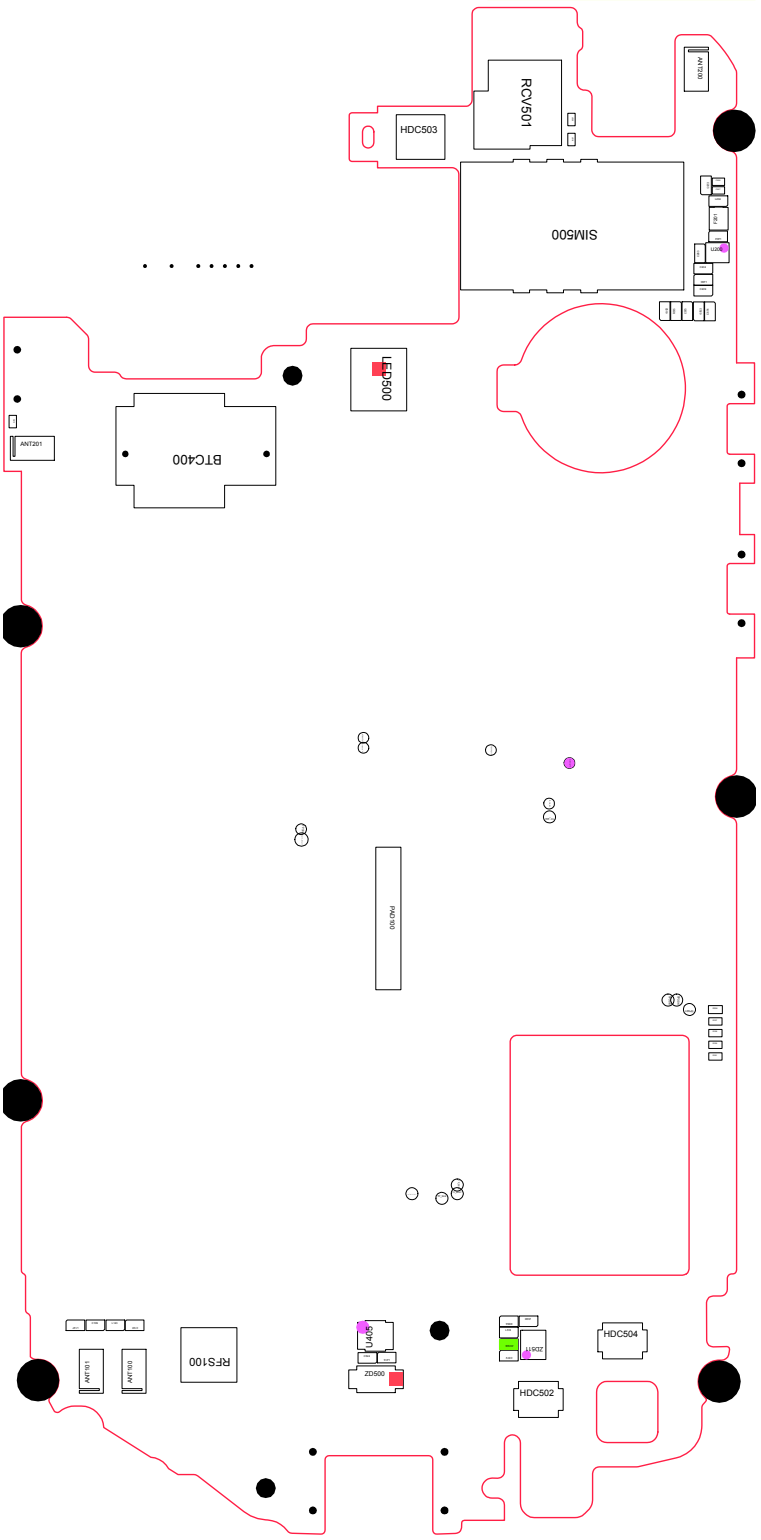
8-2-2. Bottom



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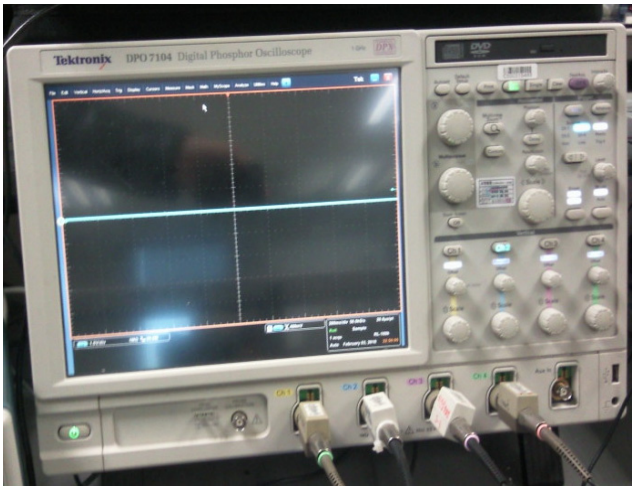
8-3. Flow Chart of Troubleshooting

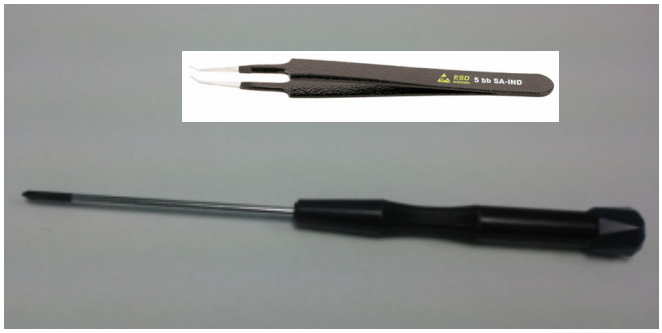
Equipments



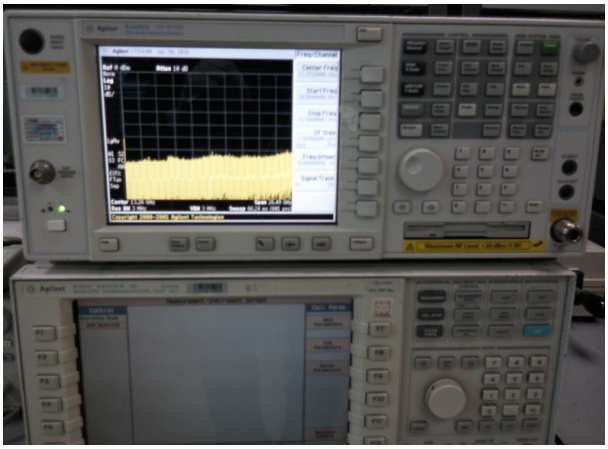
↑ Oscilloscope

↑ Digital Multi-meter

↑ Power Supply



↑ + driver, ESD Safe Tweezer



↑ 8960 & Spectrum Analyzer

↑ Soldering iron

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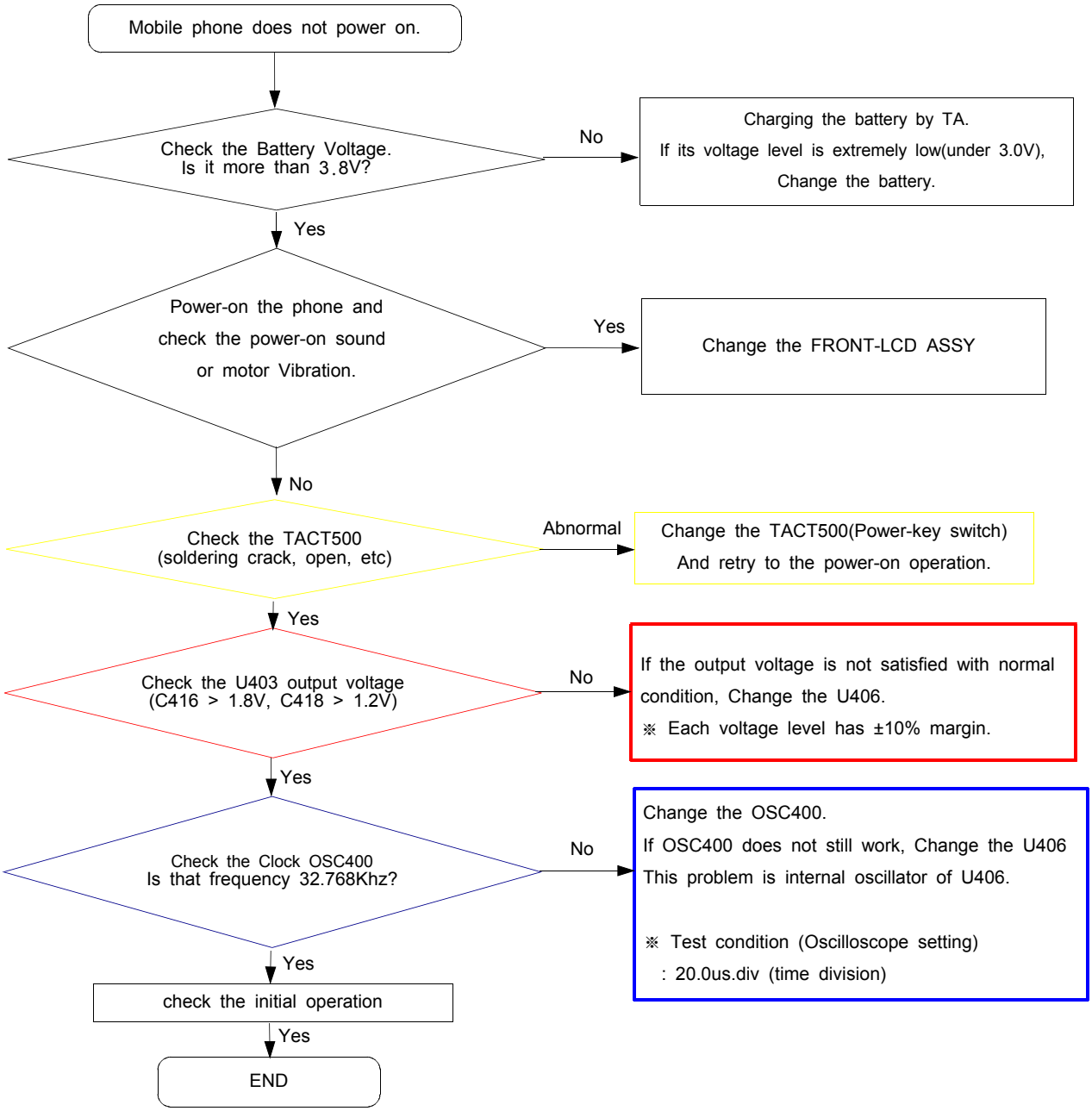
8-3-1. Power On



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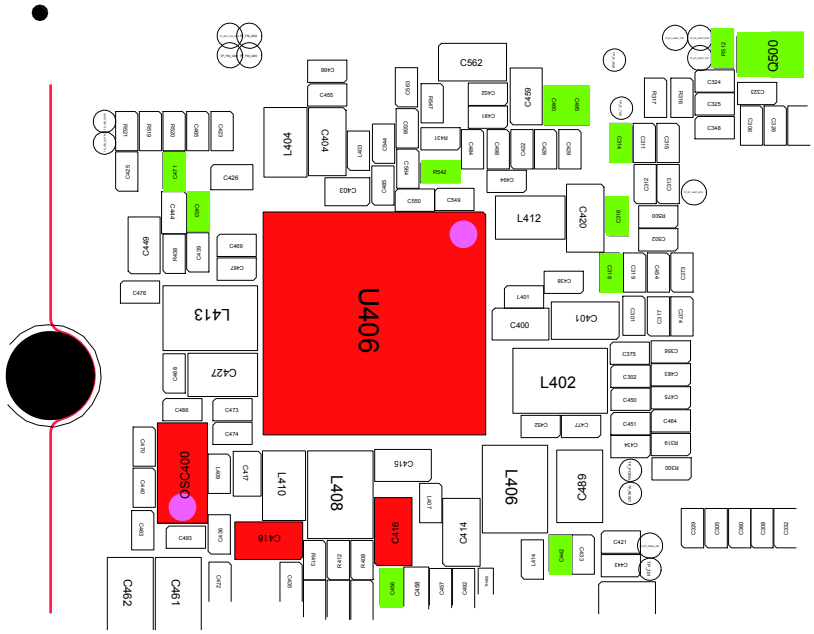

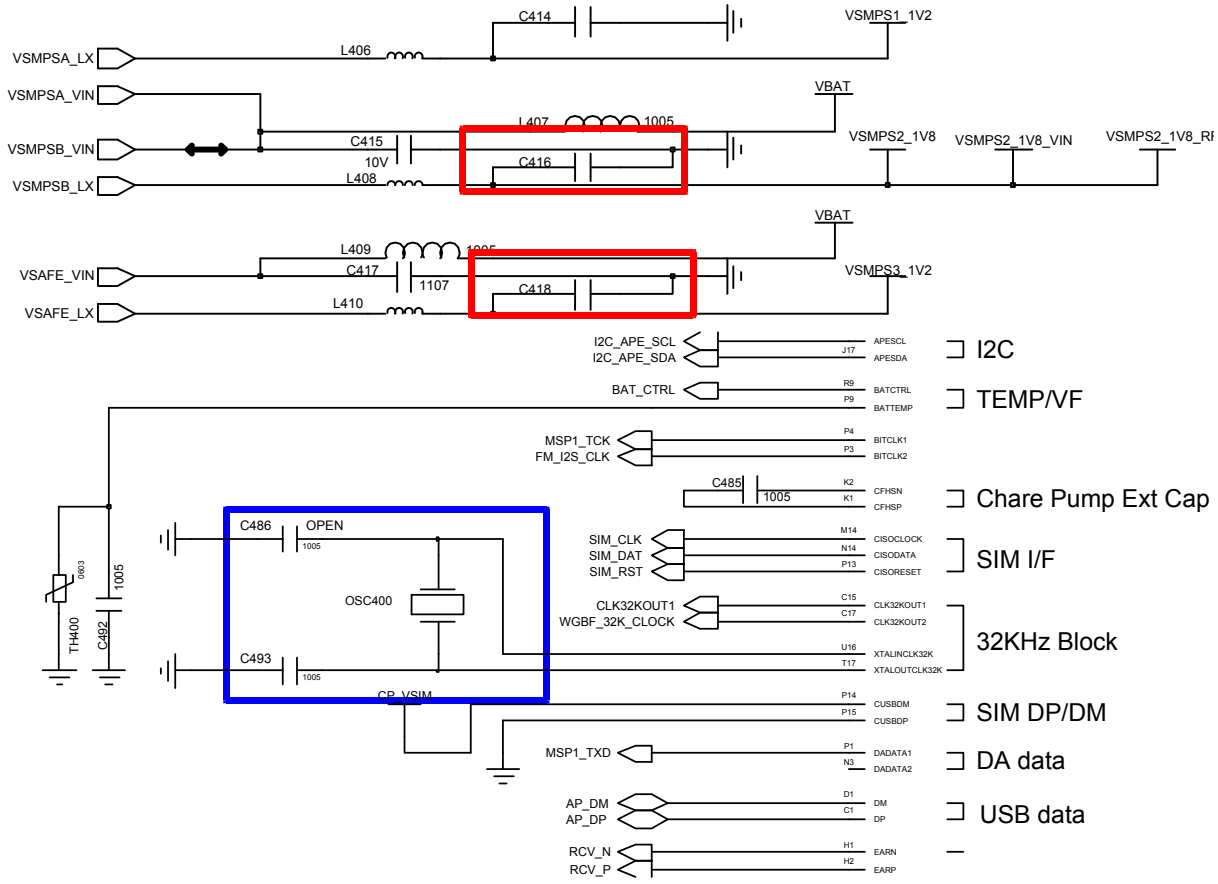

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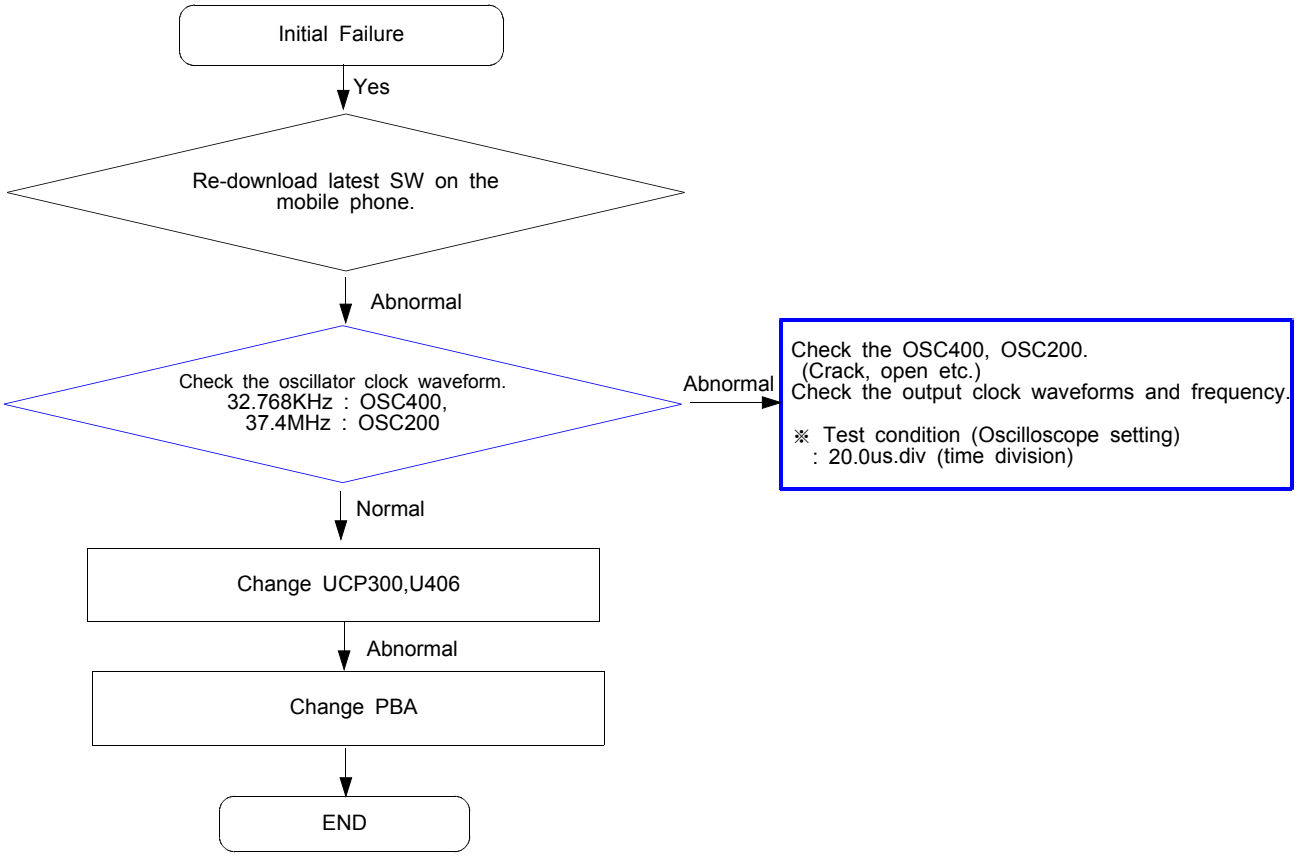
8-3-2. Initial



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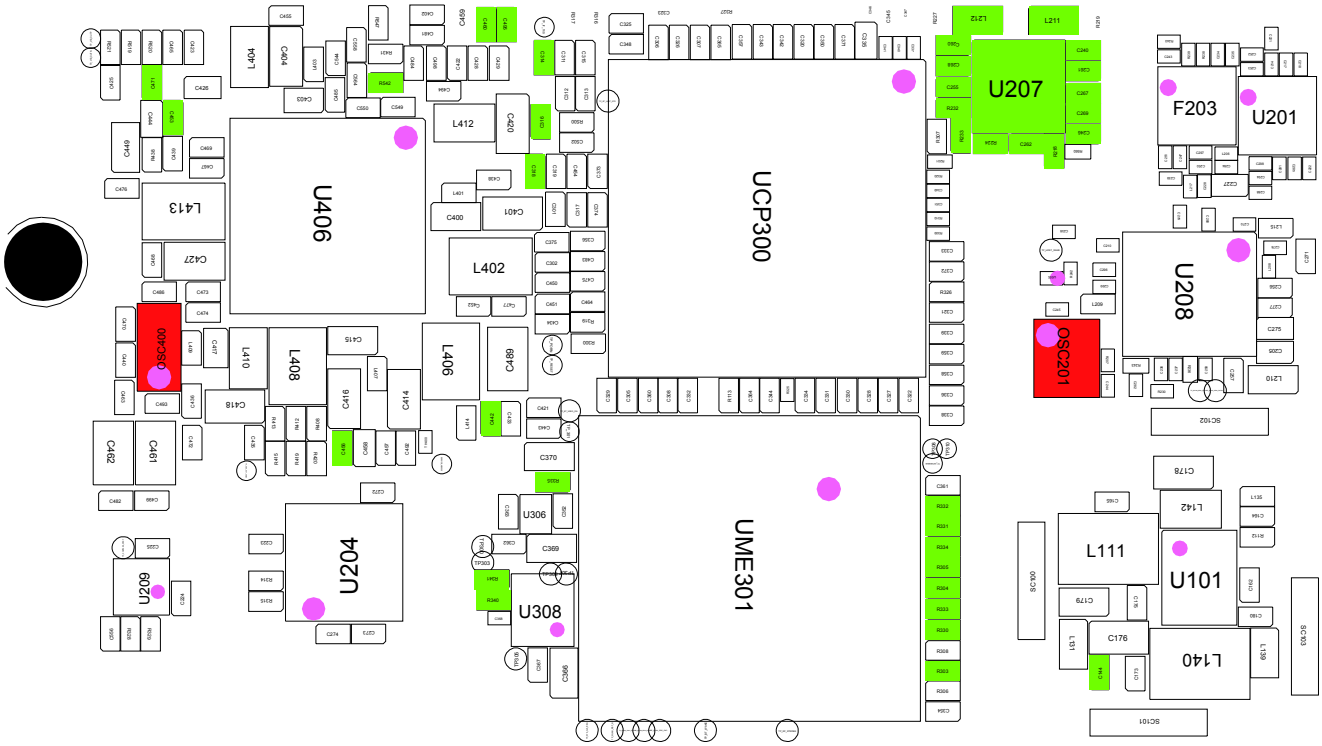

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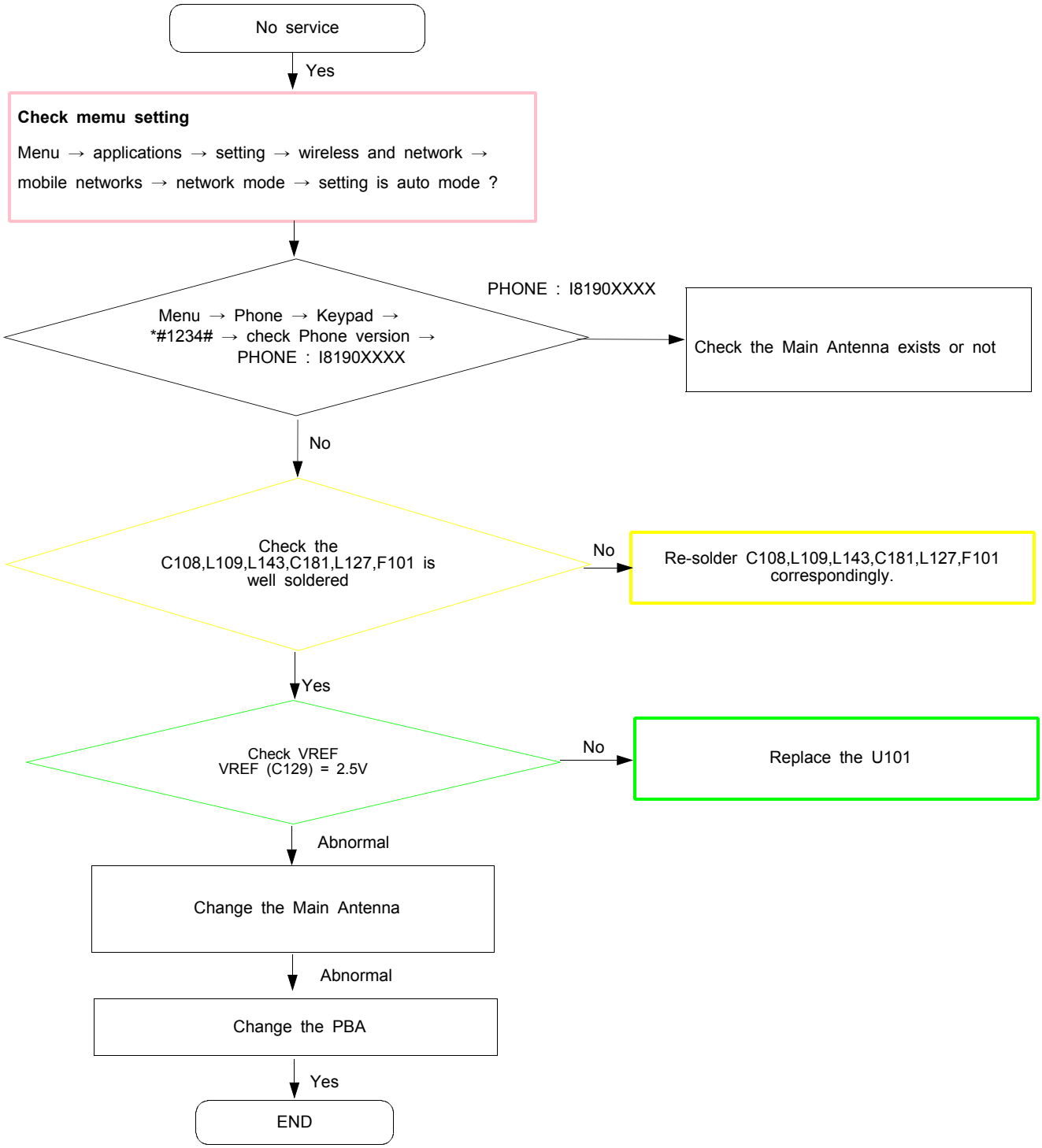
8-3-3. No Service


No service
Yes
Check memu setting
Menu → applications → setting → wireless and network → mobile networks → network mode → setting is auto mode ?
Menu → Phone → Keypad → *#1234# → check Phone version → PHONE : I8190XXXX
PHONE : I8190XXXX
Check the Main Antenna exists or not
No
Check the C108,L109,L143,C181,L127,F101 is well soldered
No
Re-solder C108,L109,L143,C181,L127,F101 correspondingly.
Yes
Check VREF VREF (C129) = 2.5V
No
Replace the U101
Abnormal
Change the Main Antenna
Abnormal
Change the PBA
Yes
END

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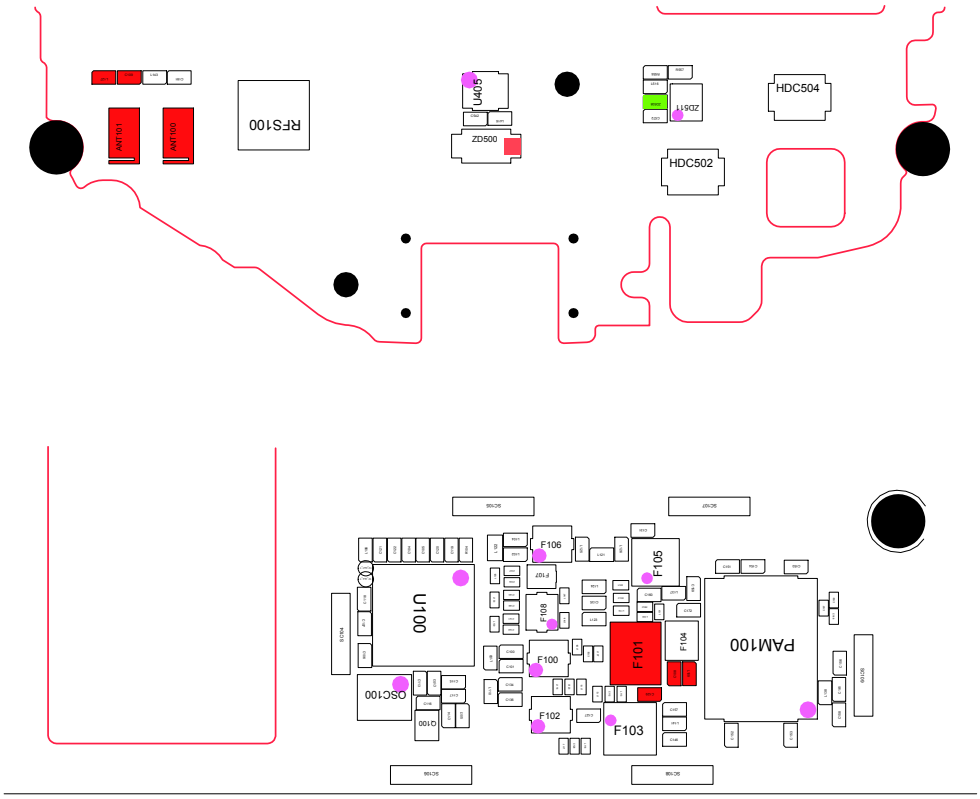

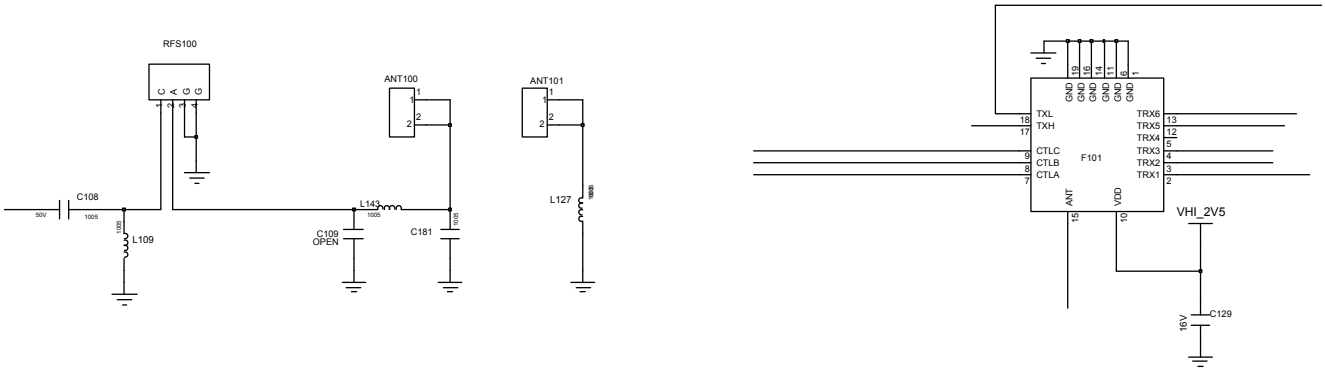

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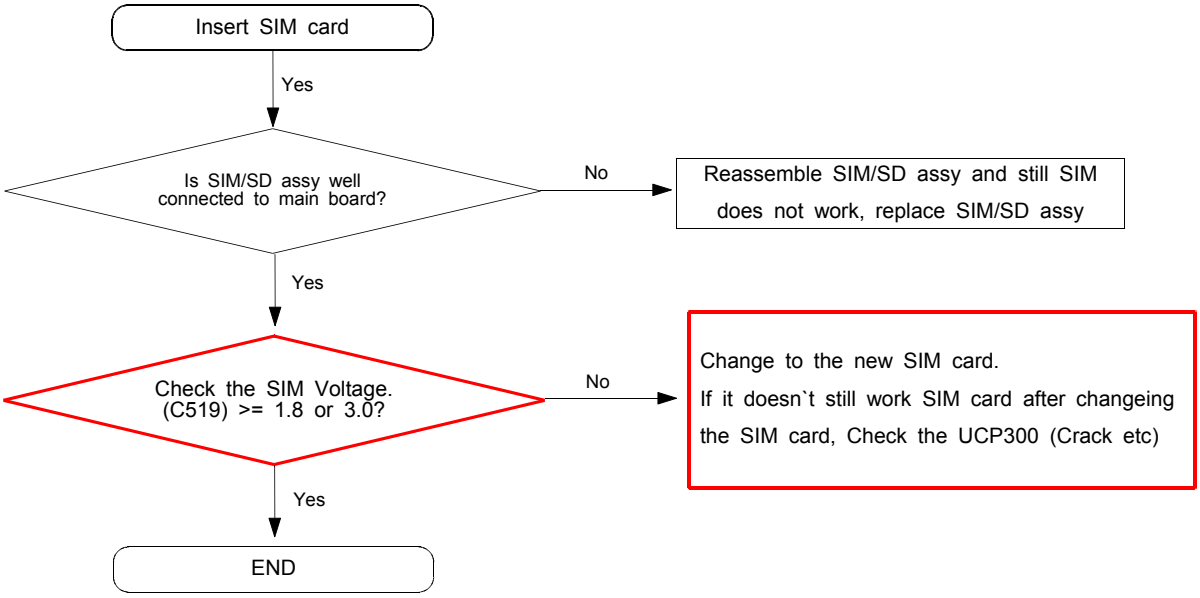
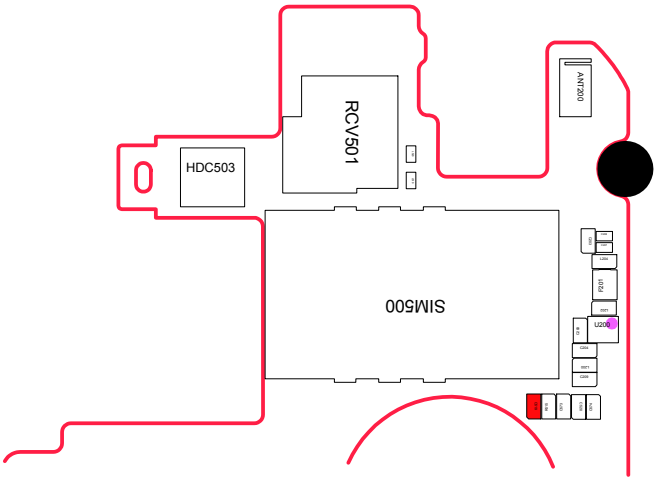
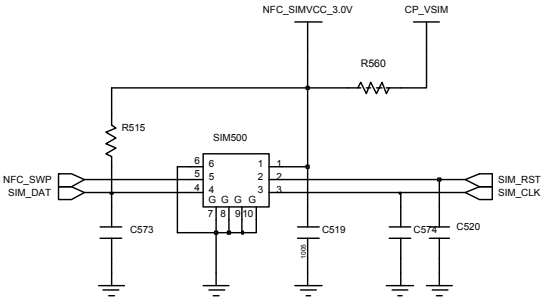
8-3-4. Sim Part


Insert SIM card
Yes
Is SIM/SD assy well connected to main board?
No
Reassemble SIM/SD assy and still SIM does not work, replace SIM/SD assy
Yes
Check the SIM Voltage. (C519) >= 1.8 or 3.0?
No
Change to the new SIM card.
If it doesn`t still work SIM card after changeing the SIM card, Check the UCP300 (Crack etc)
Yes
END





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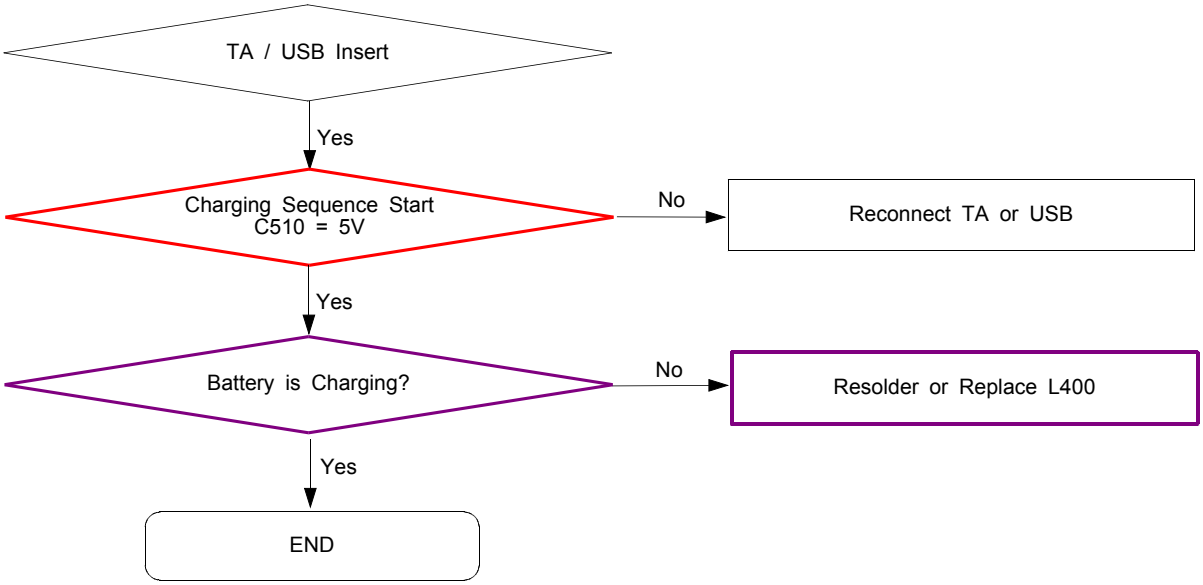
8-3-5. Charging Part



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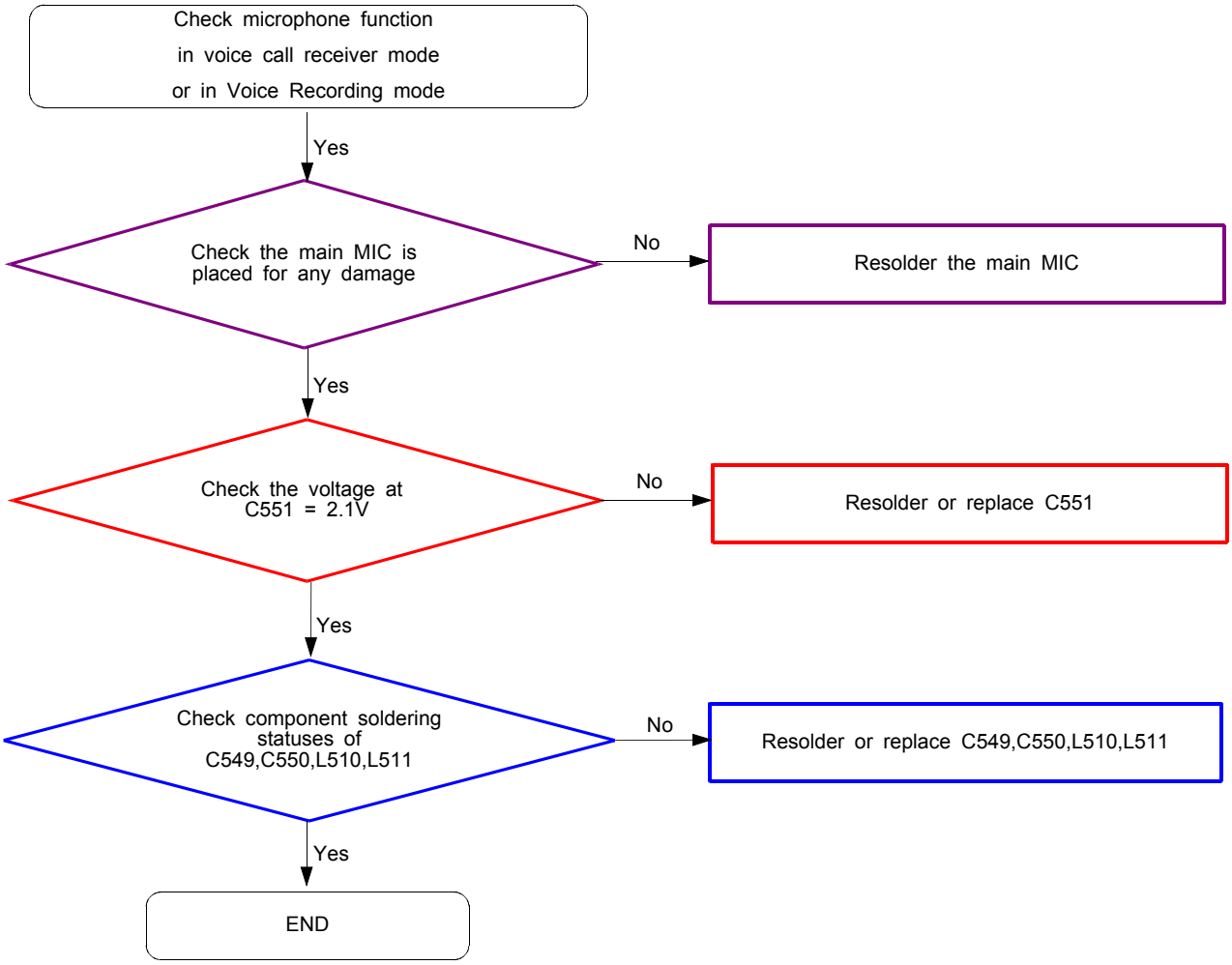
8-3-6. Microphone Part



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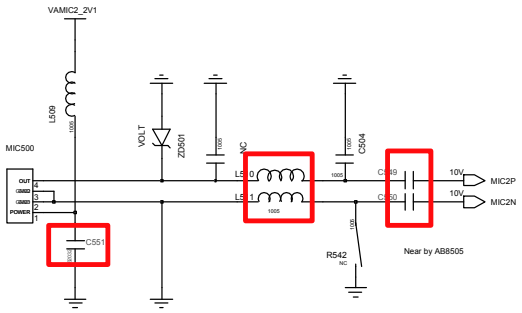

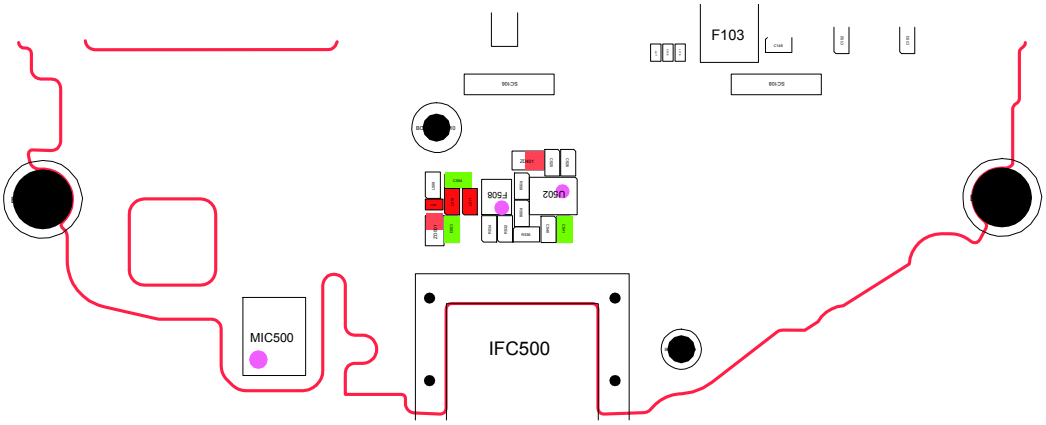

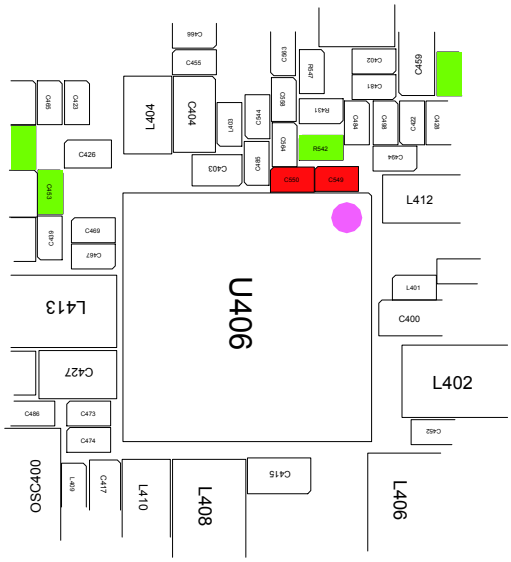

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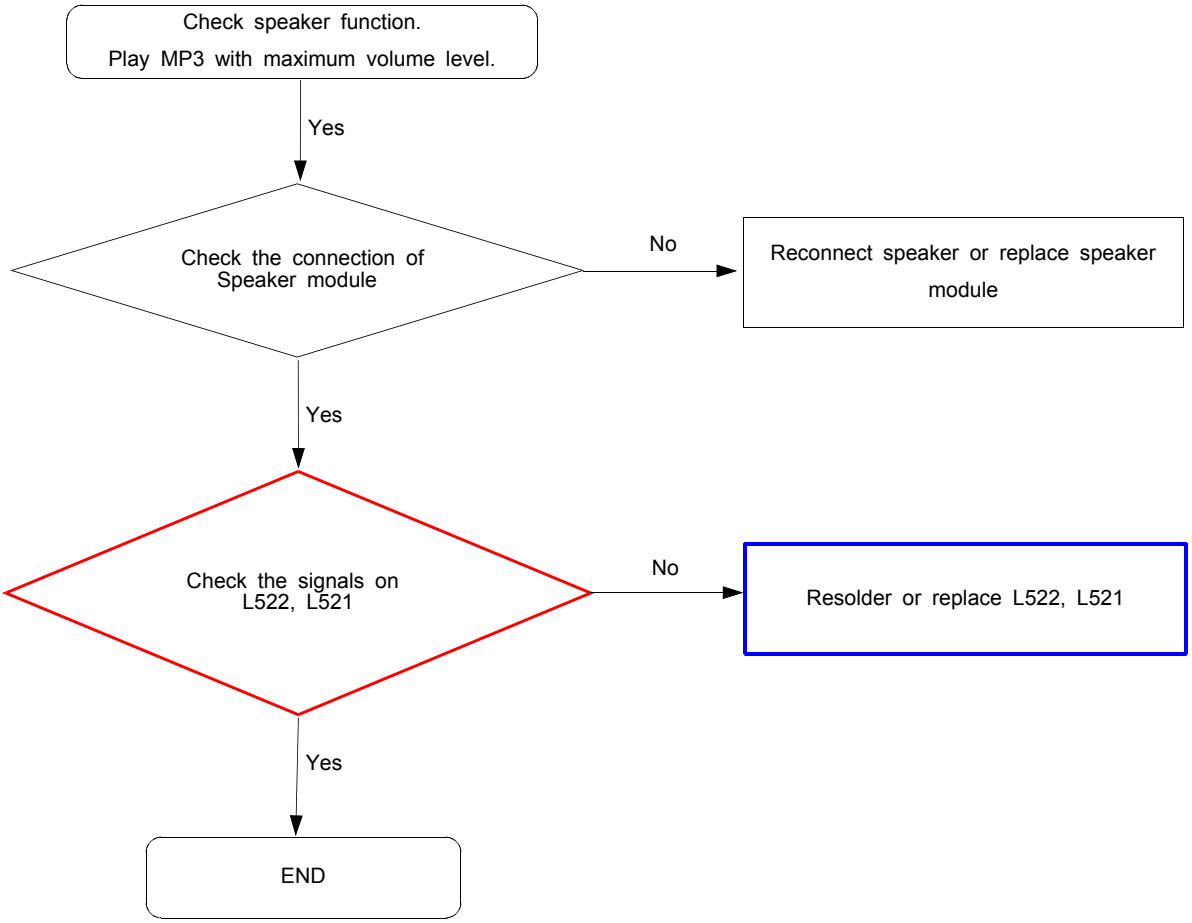
8-3-7. Speaker Part



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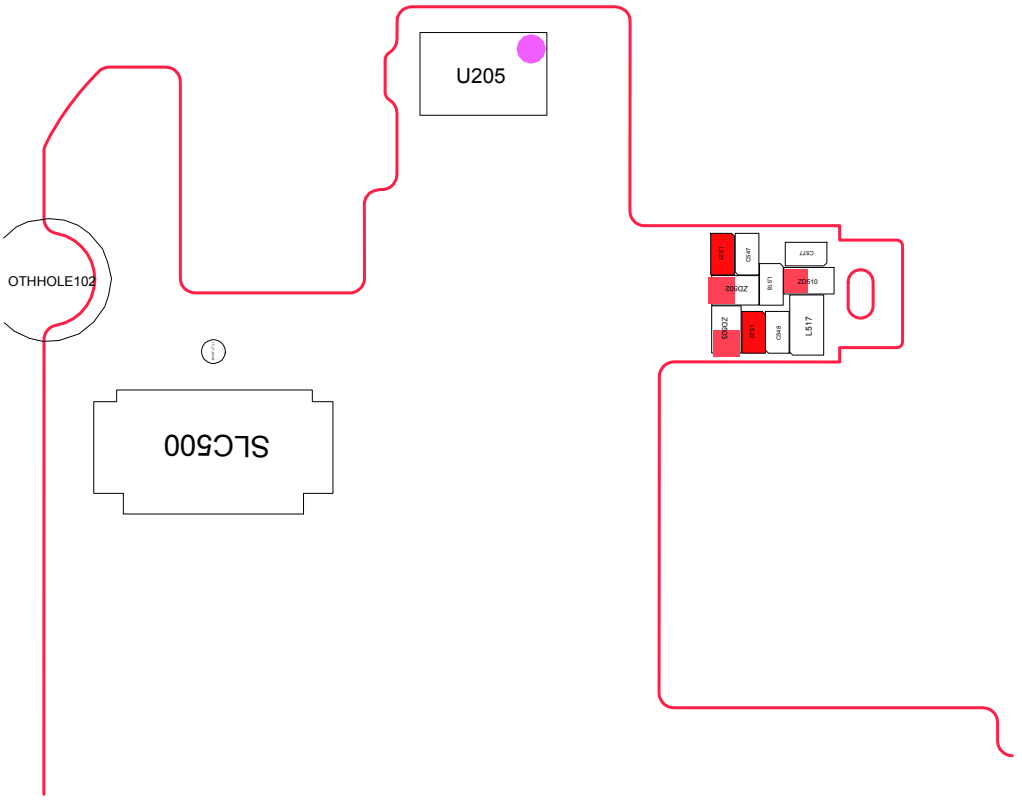

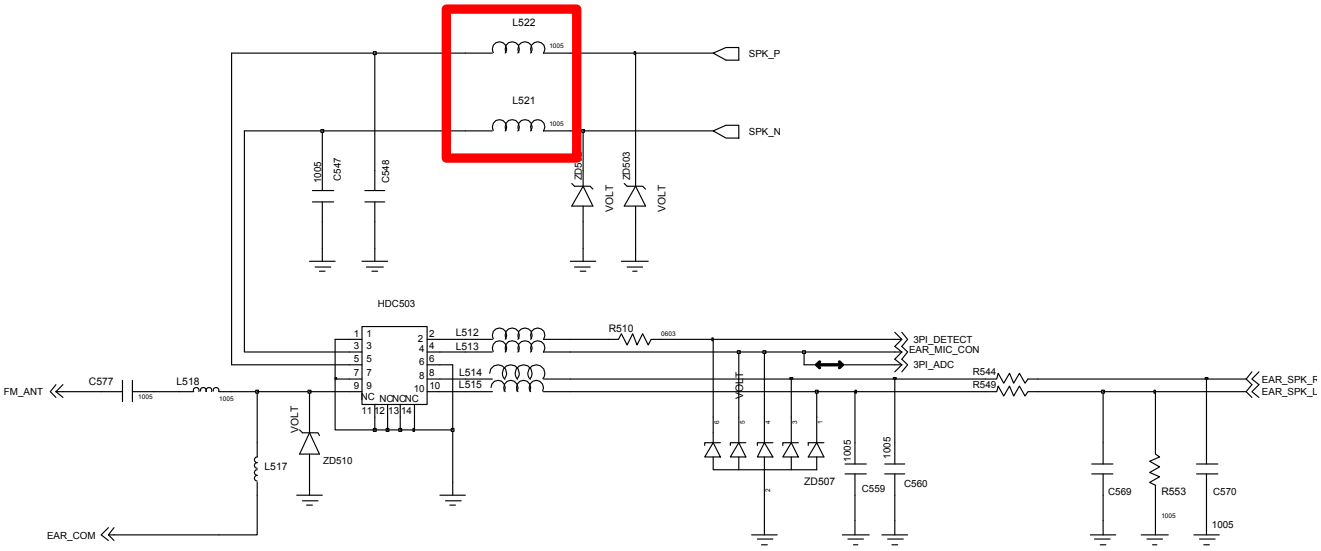

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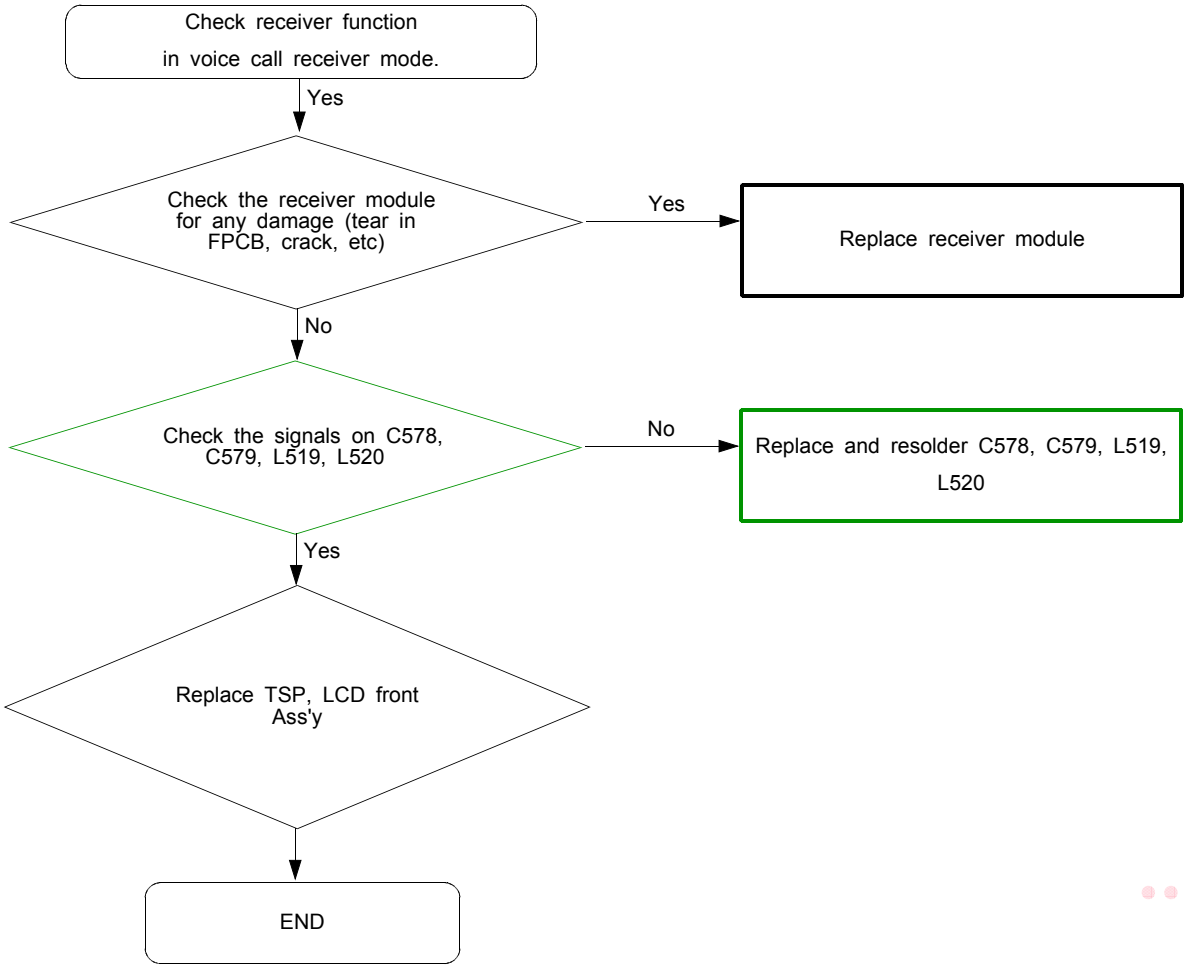
8-3-8 Receiver Part



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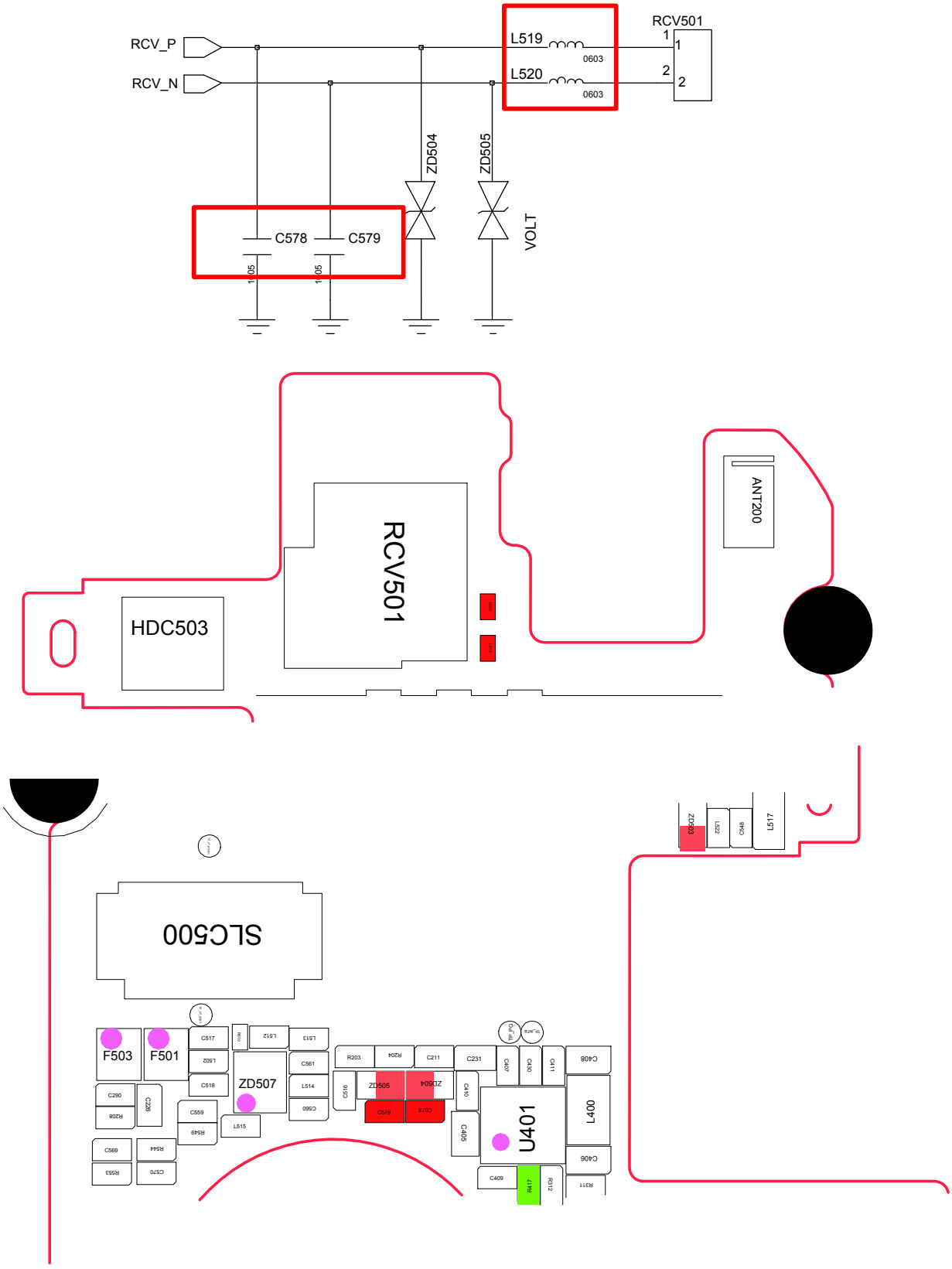

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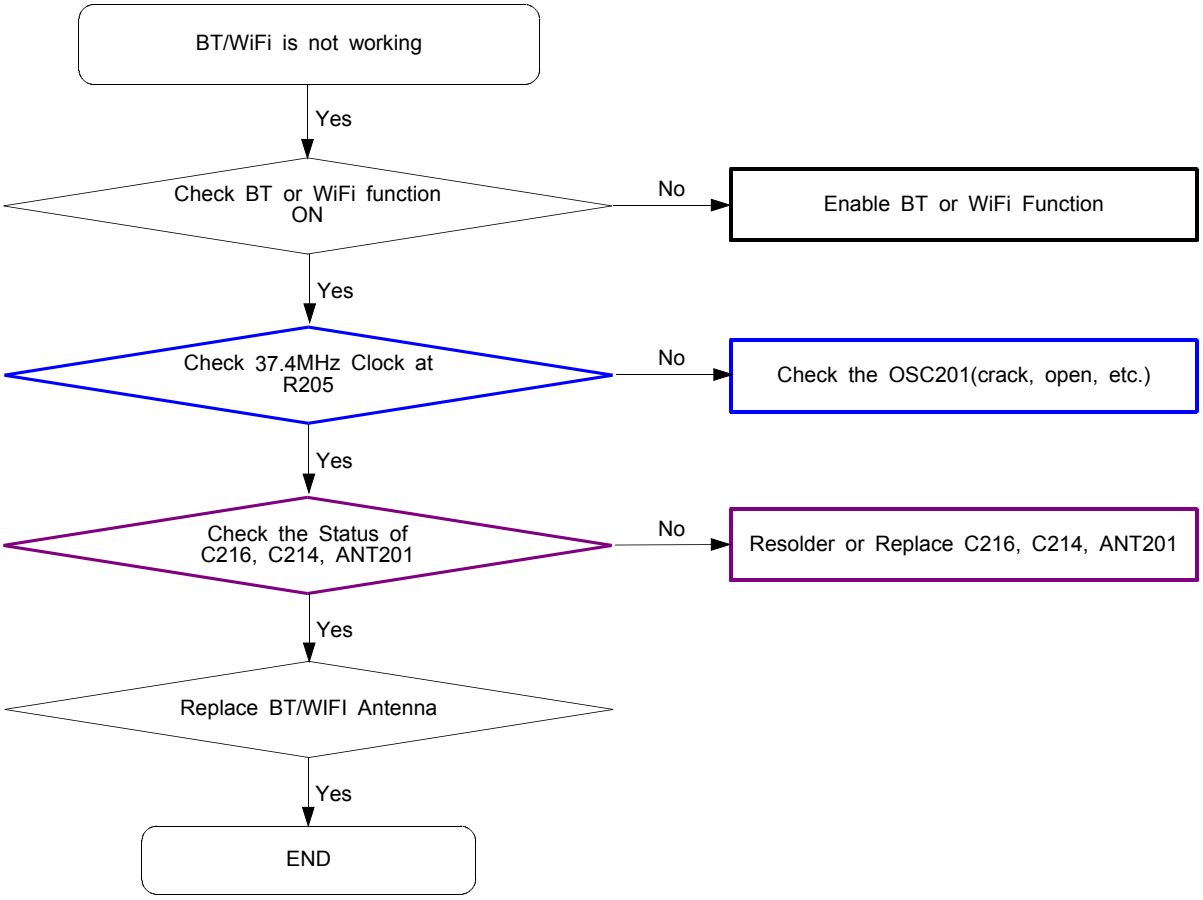
8-3-9. BT/WIFI



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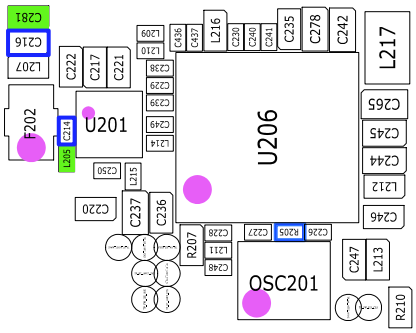

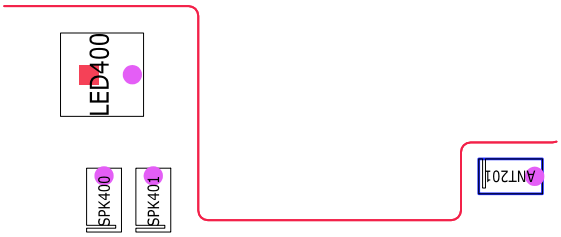

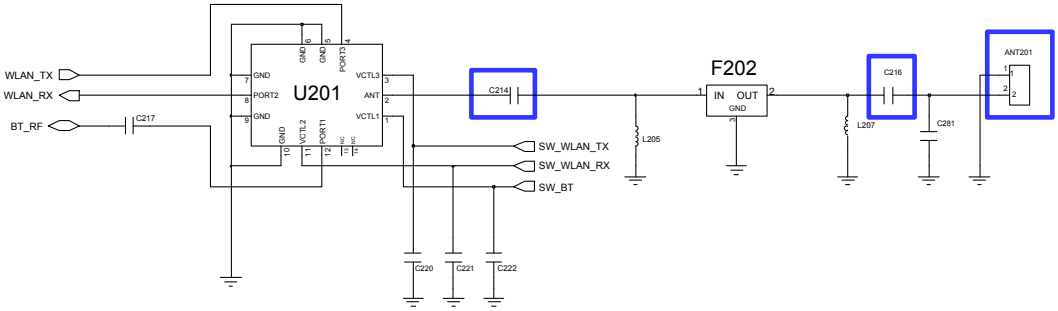

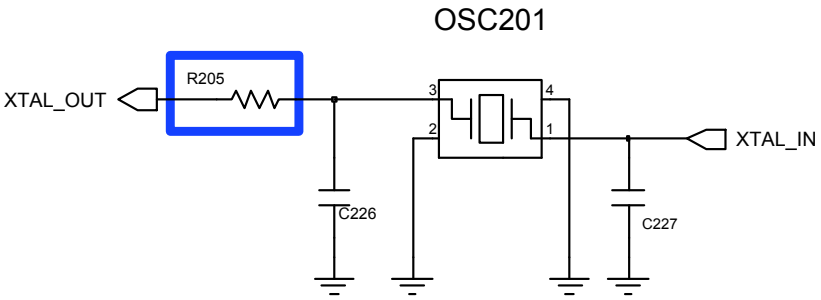

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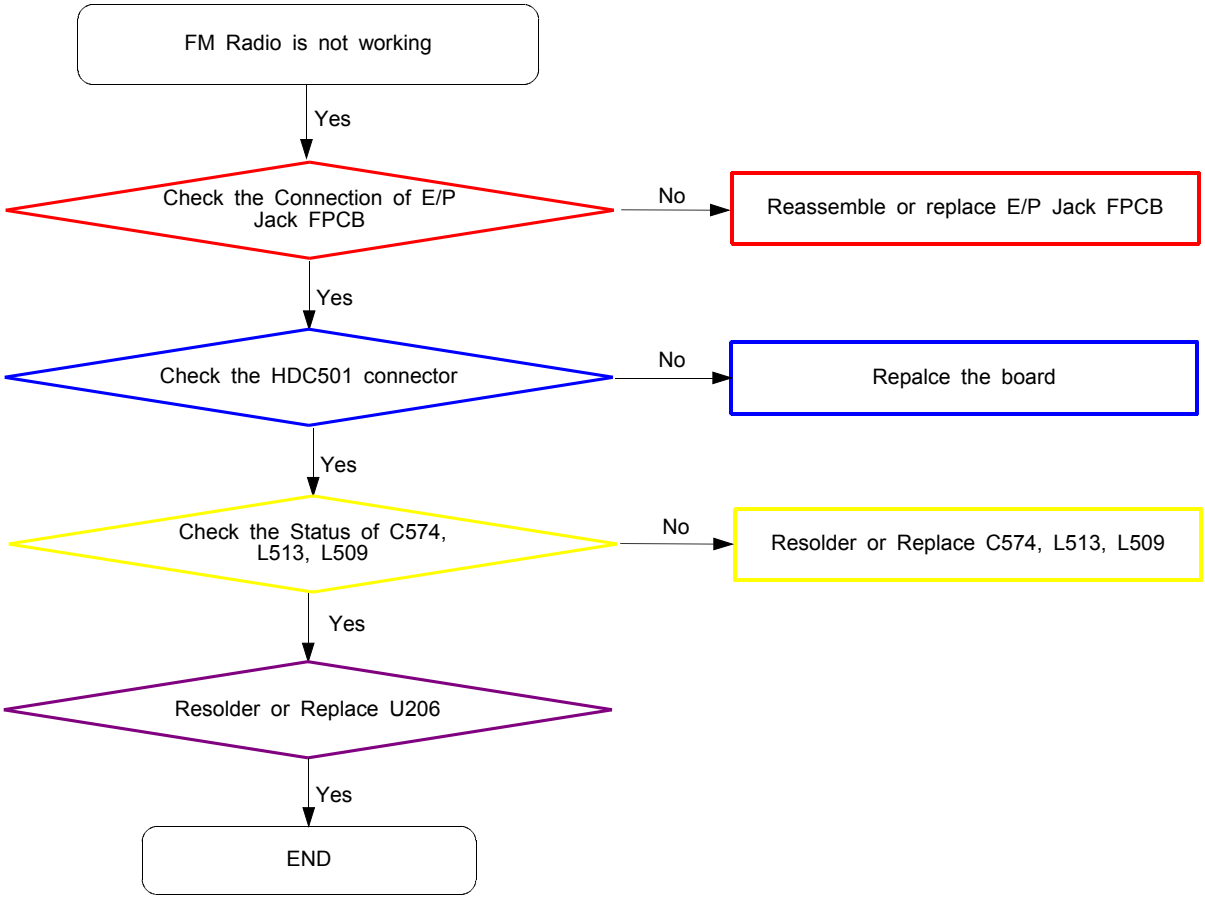
8-3-10. FM RADIO



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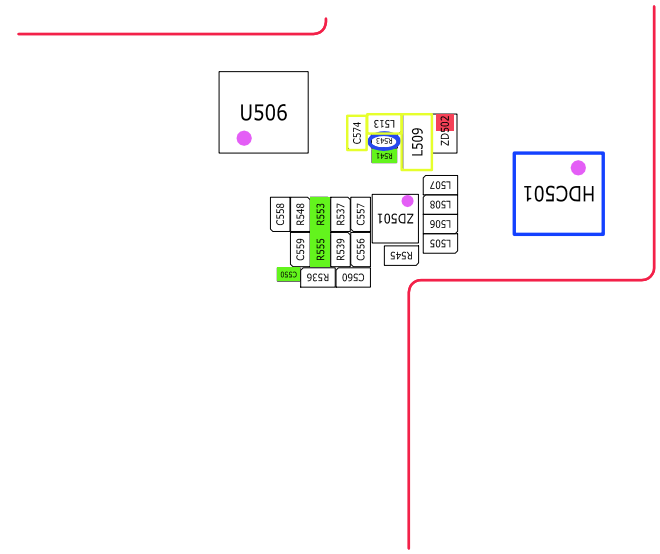

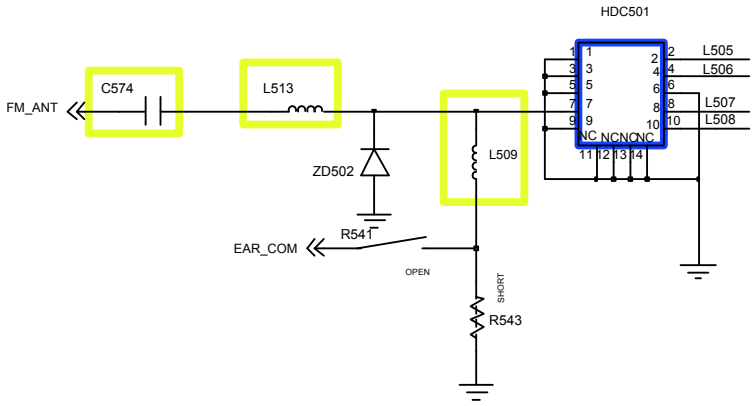

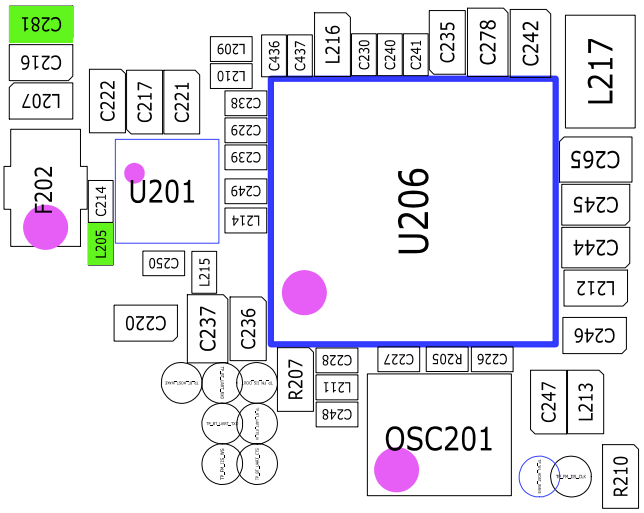

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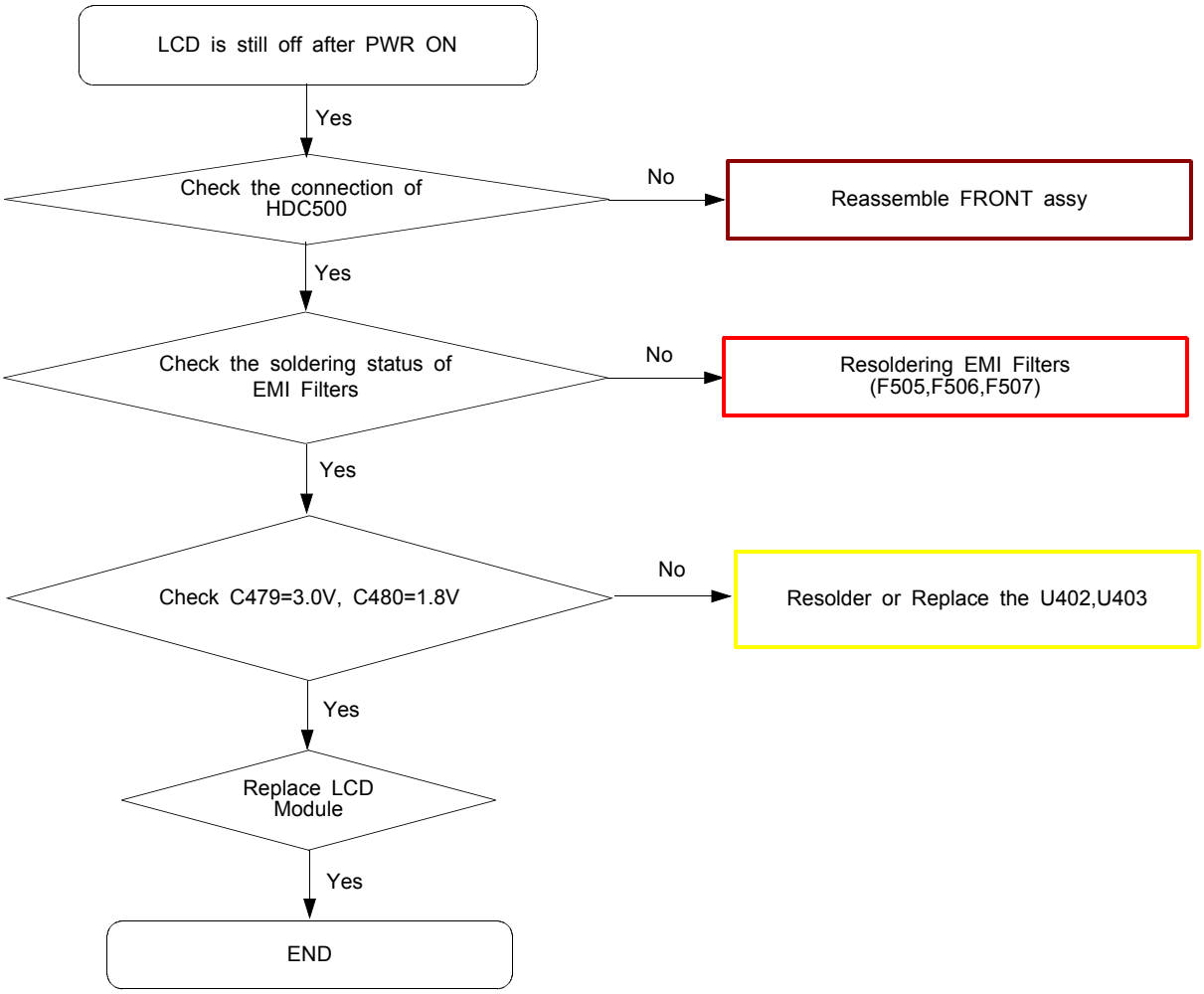
8-3-11. LCD



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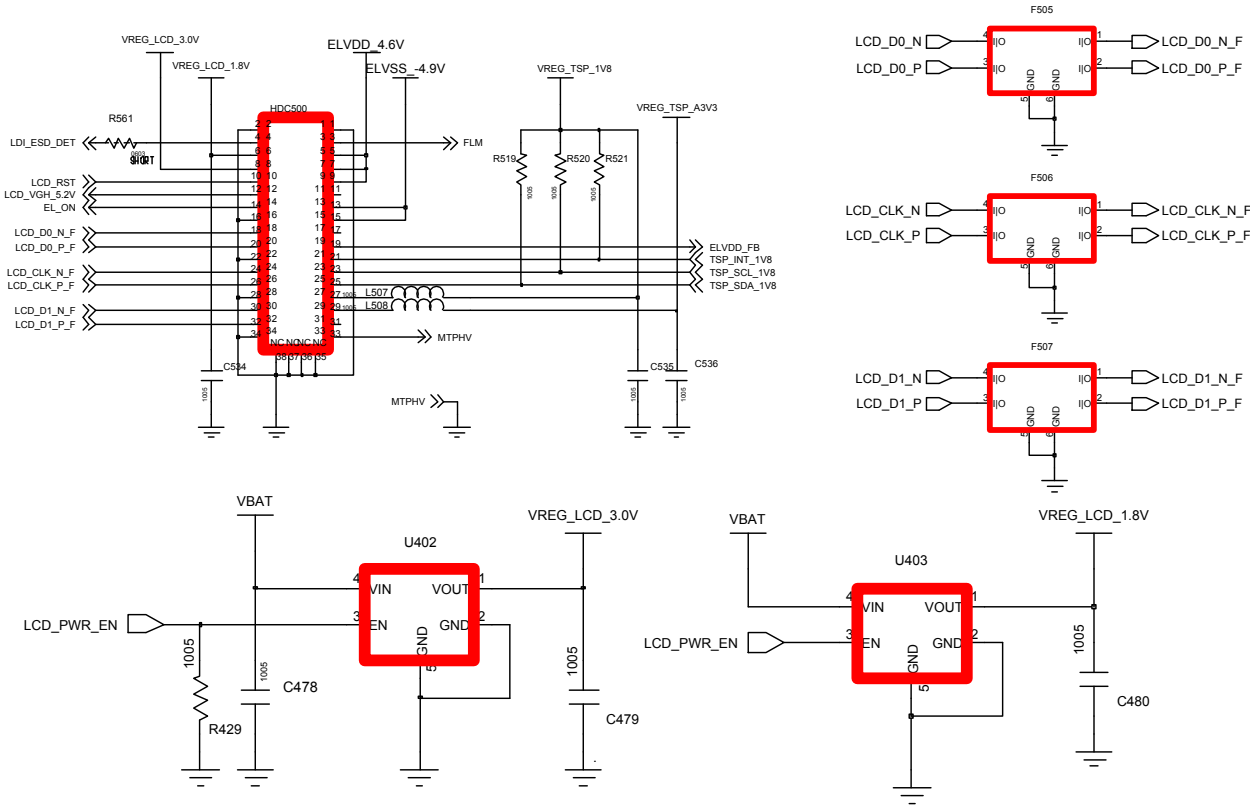

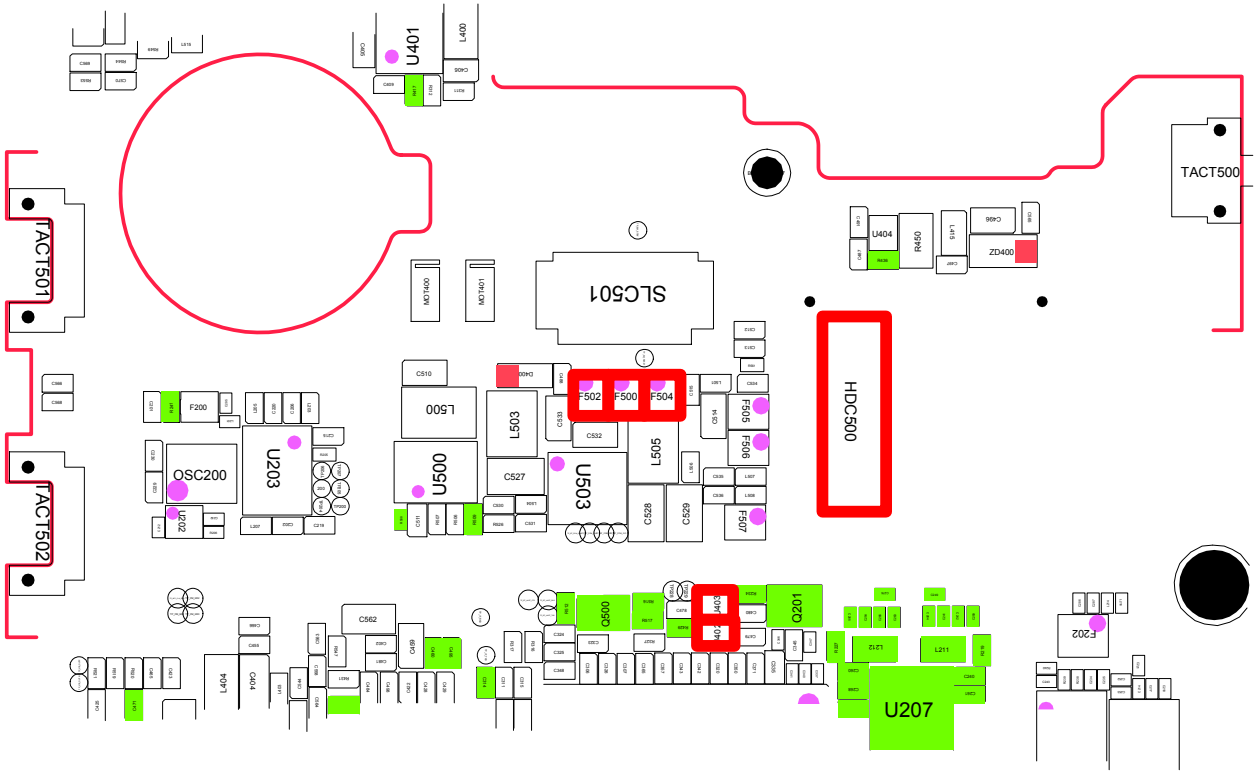

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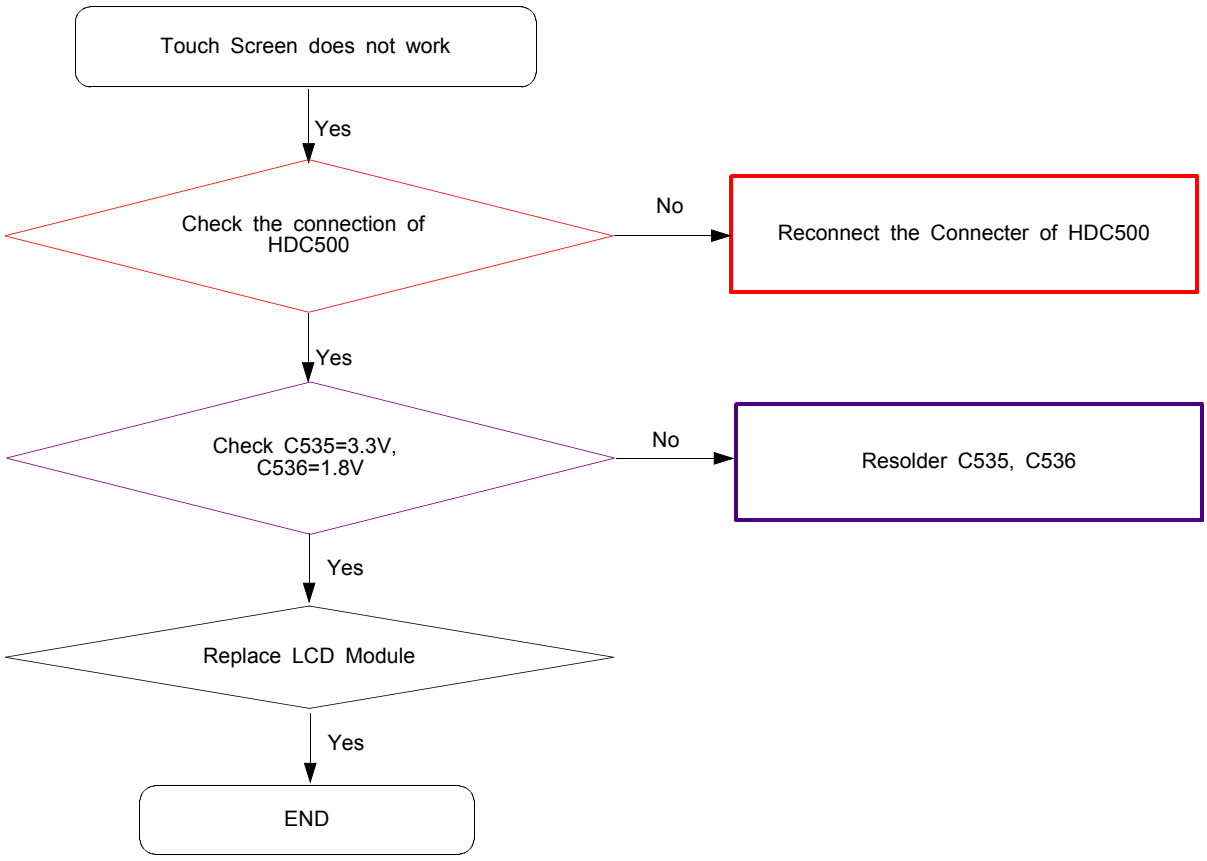
8-3-12. TSP



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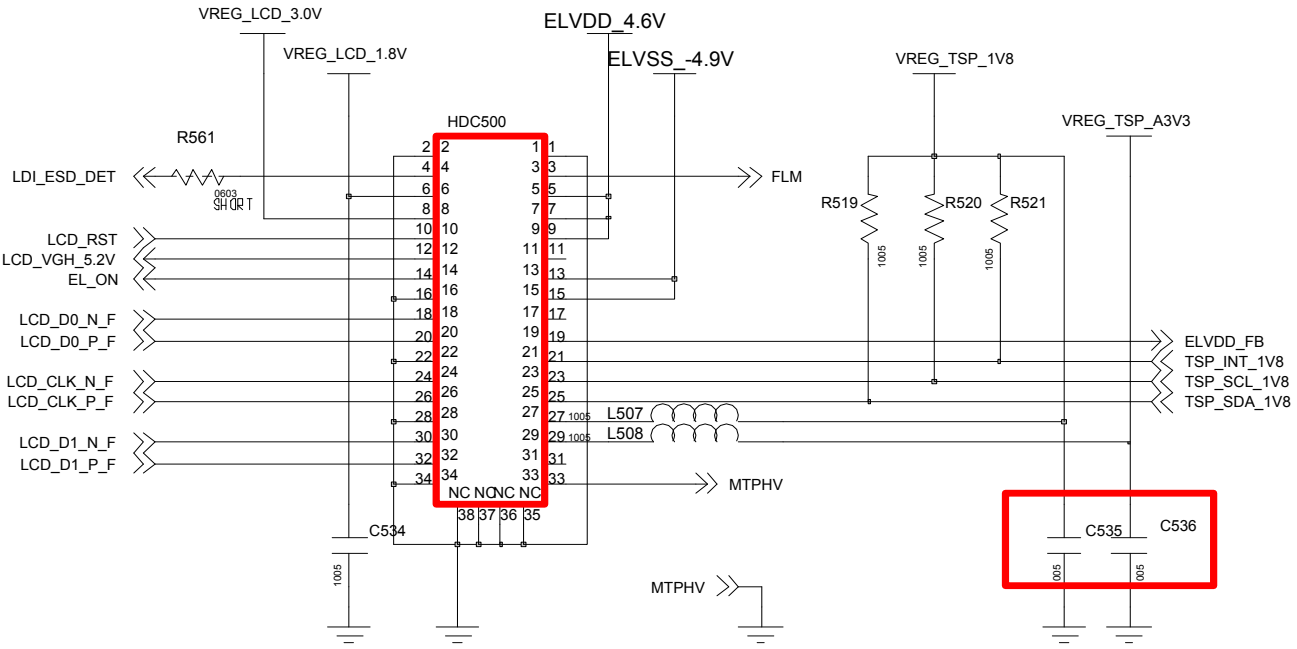

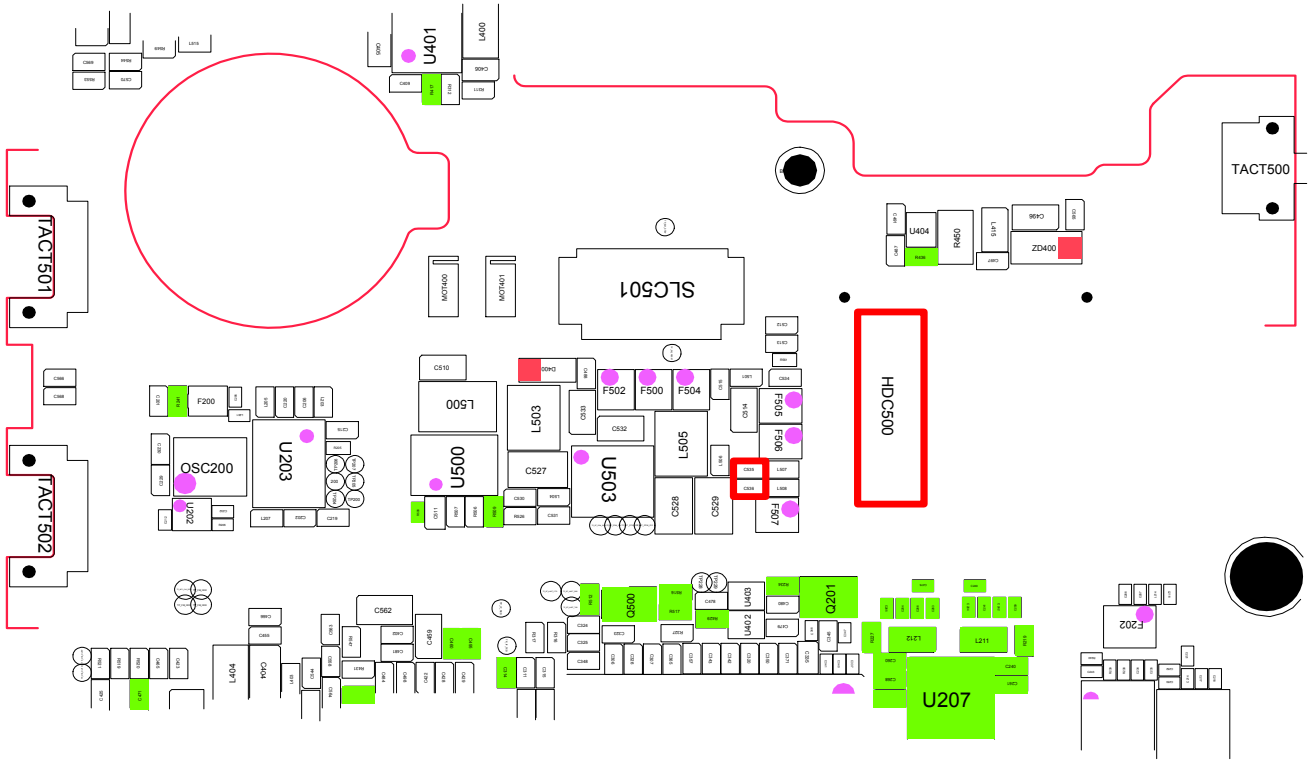

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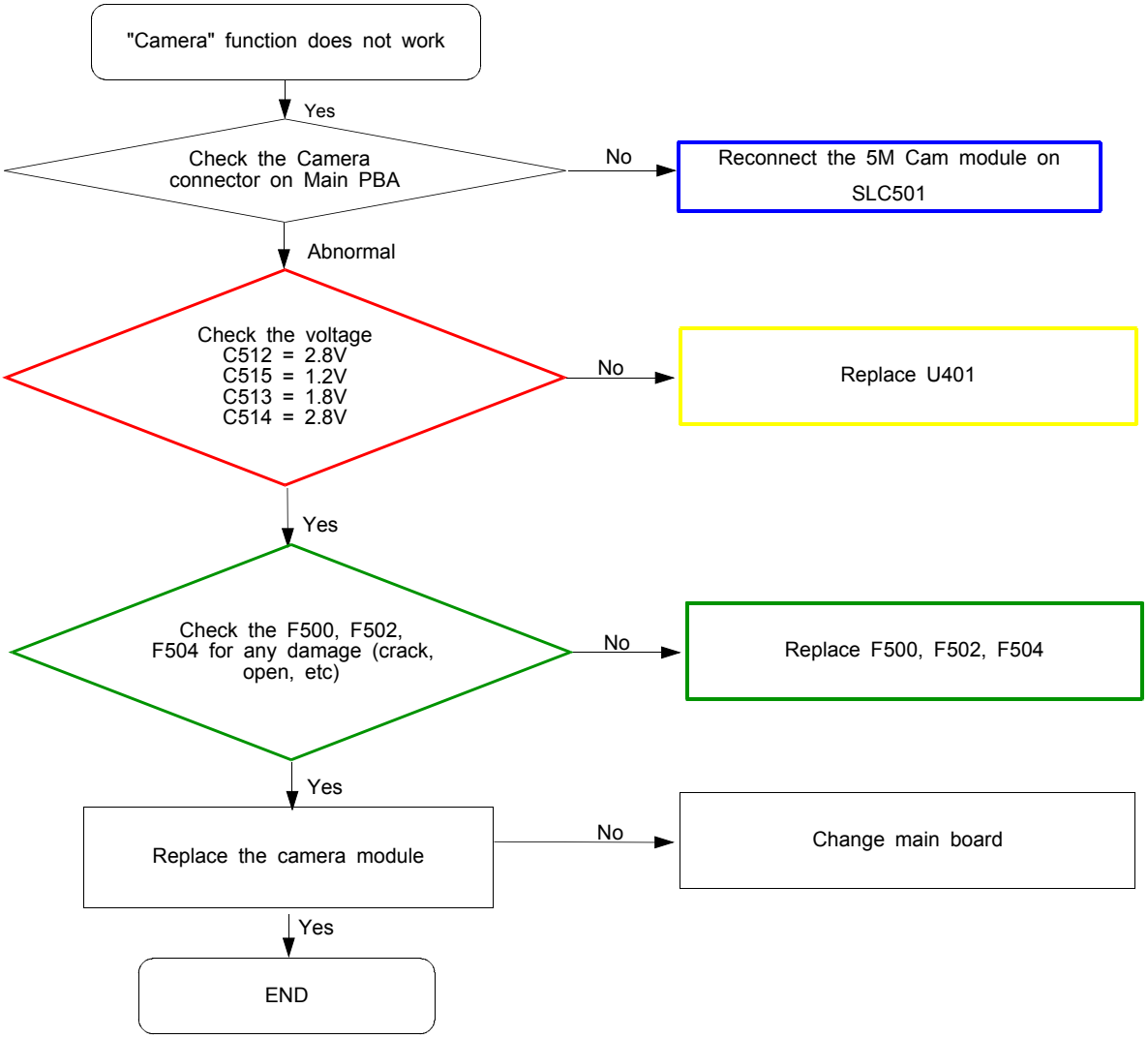
8-3-13. 5M CAM



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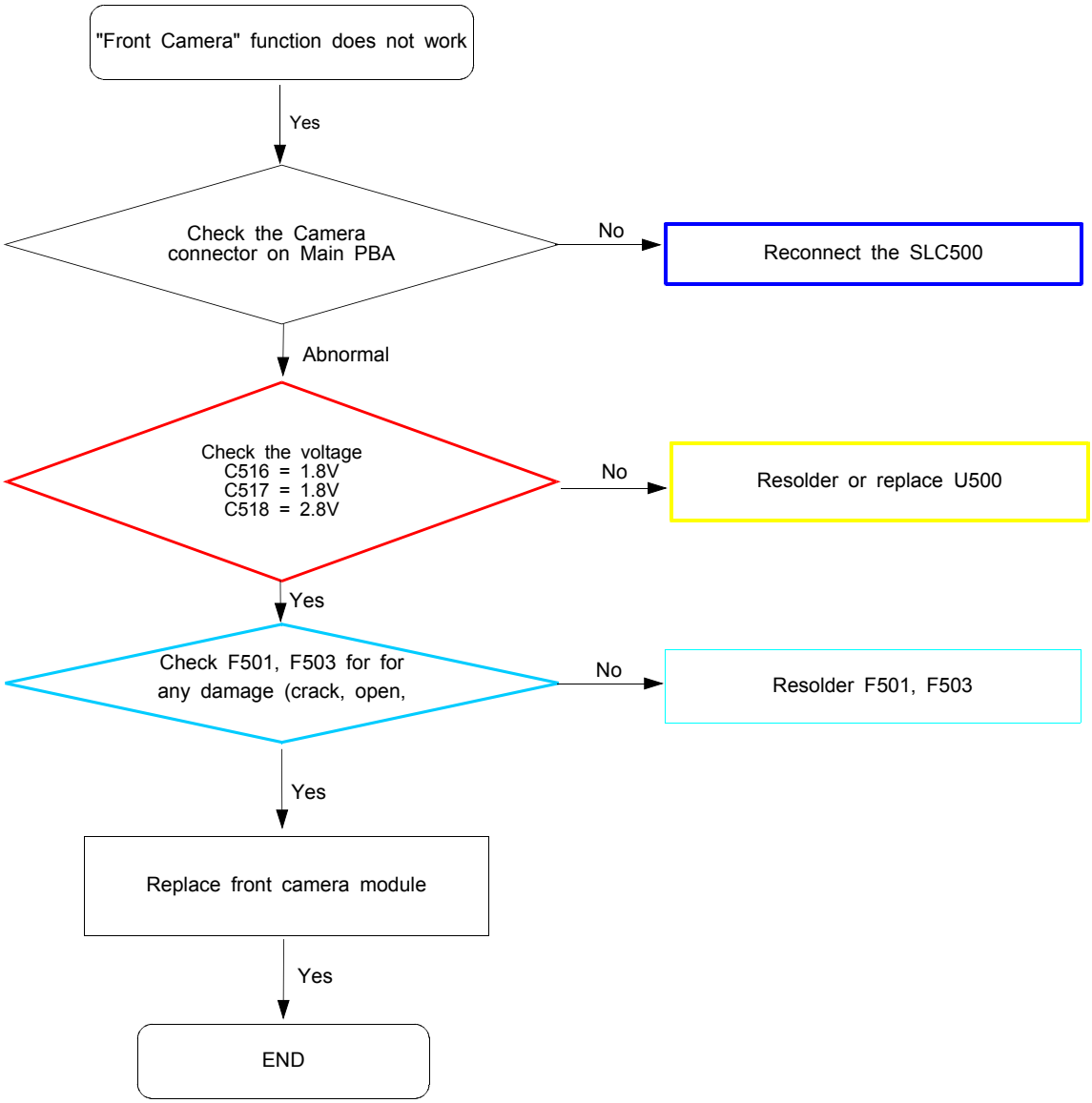
8-3-14. 1.3M CAM



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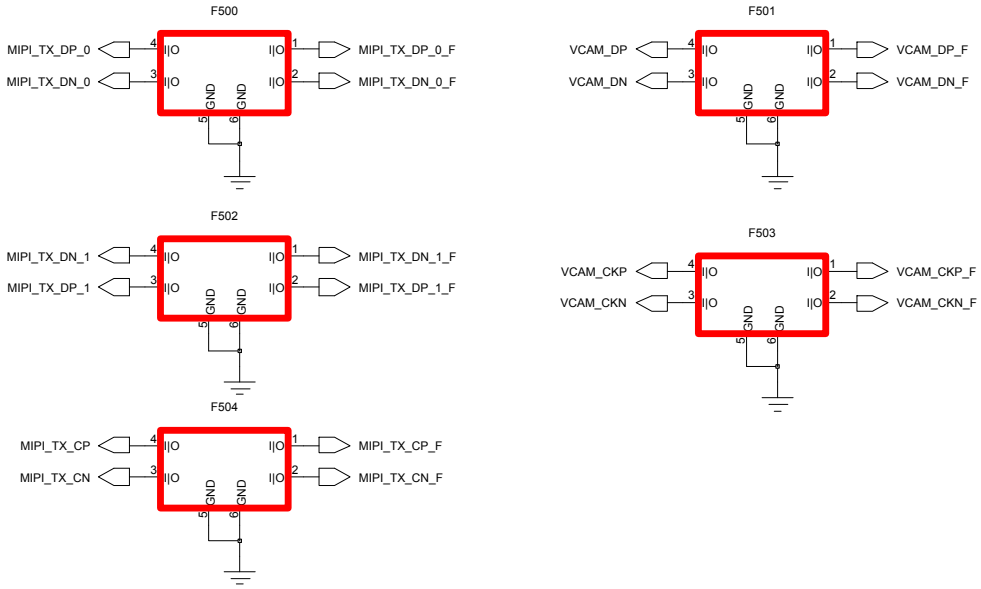

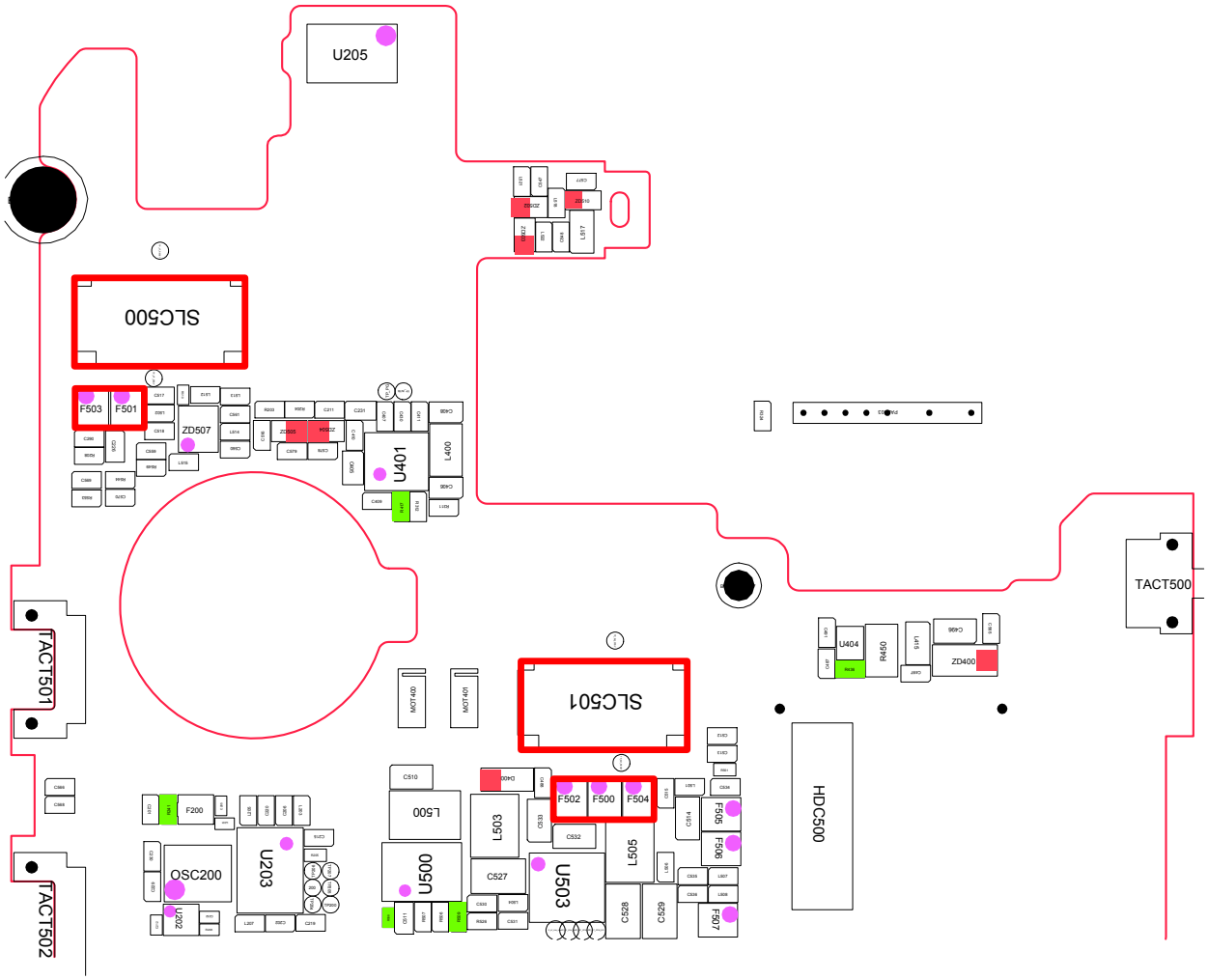

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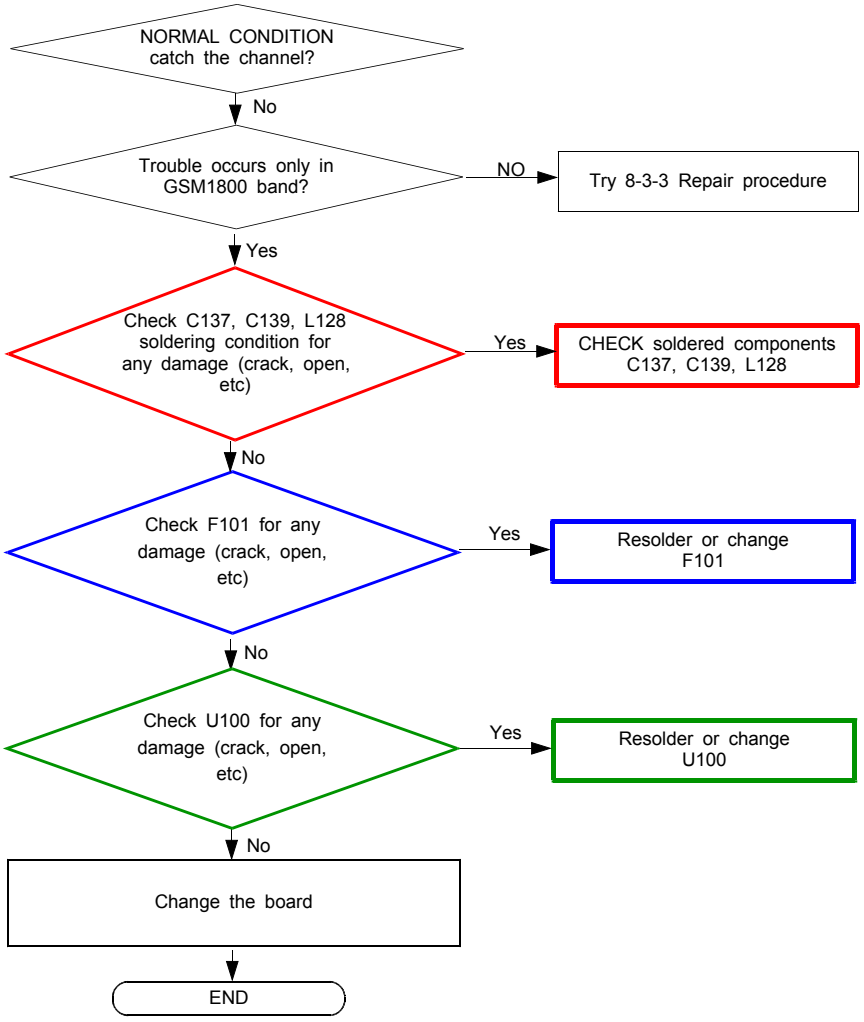
8-3-15. GSM850 RX



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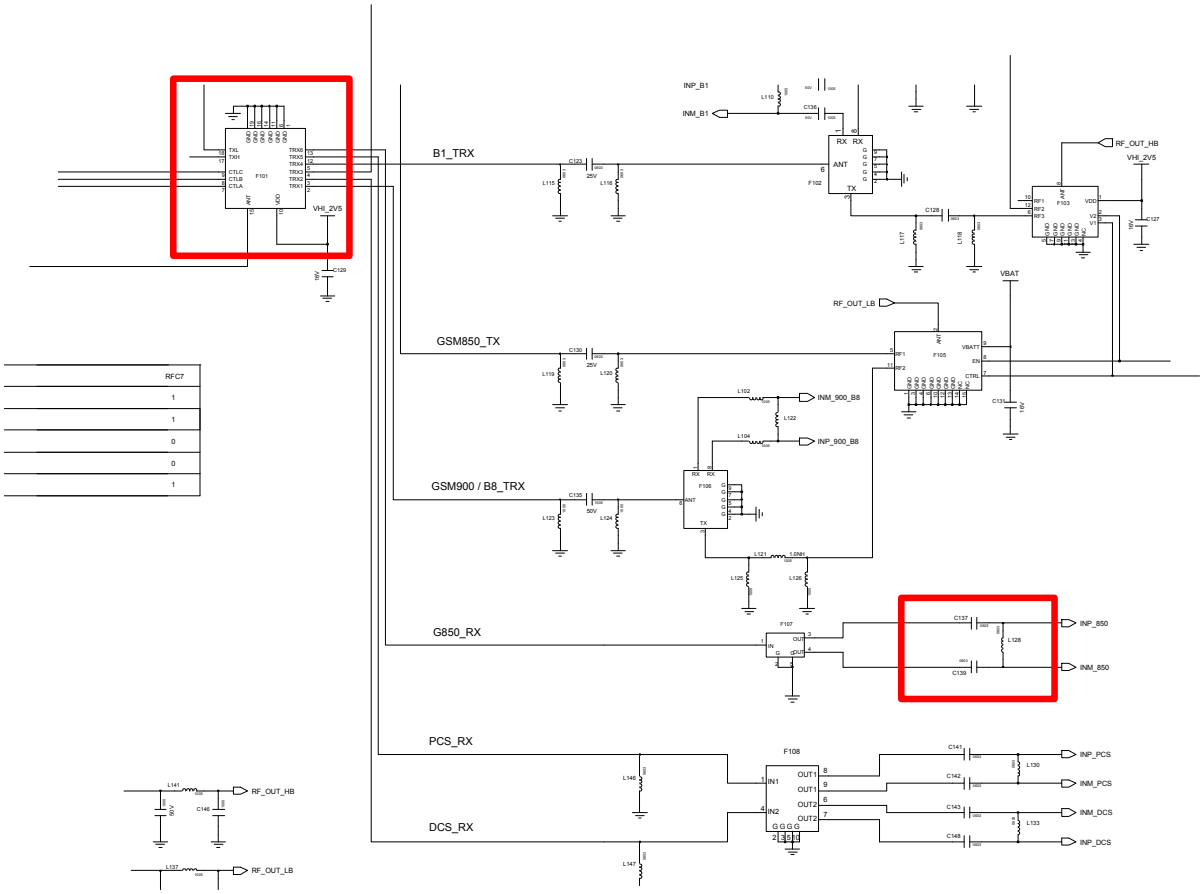

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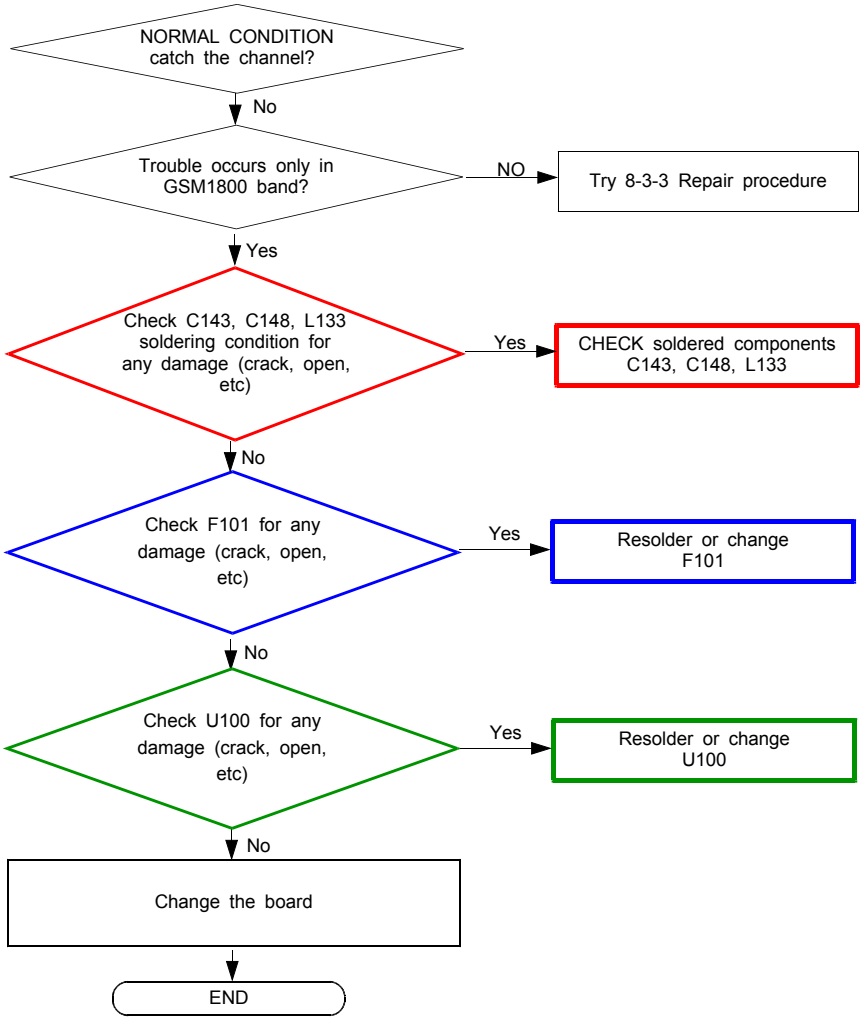
8-3-15. GSM1800 RX



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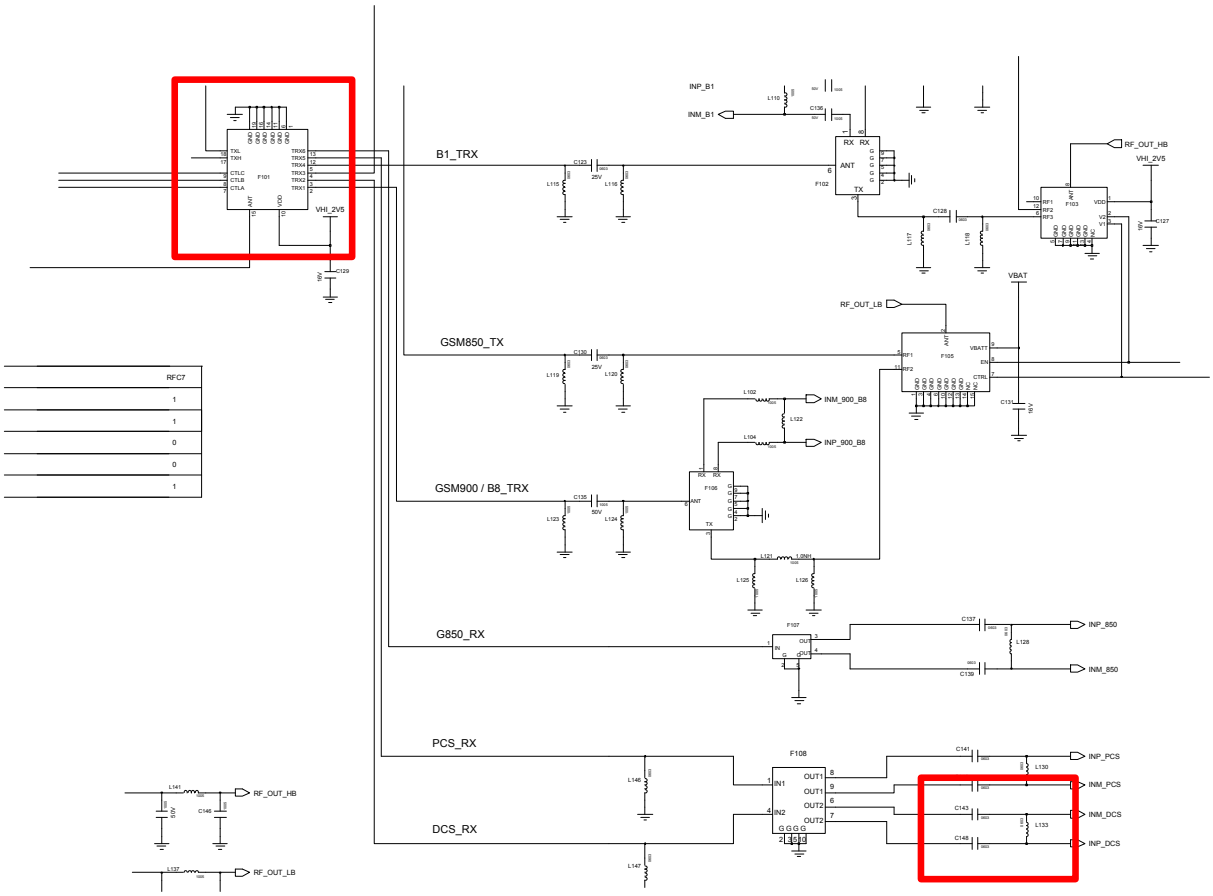

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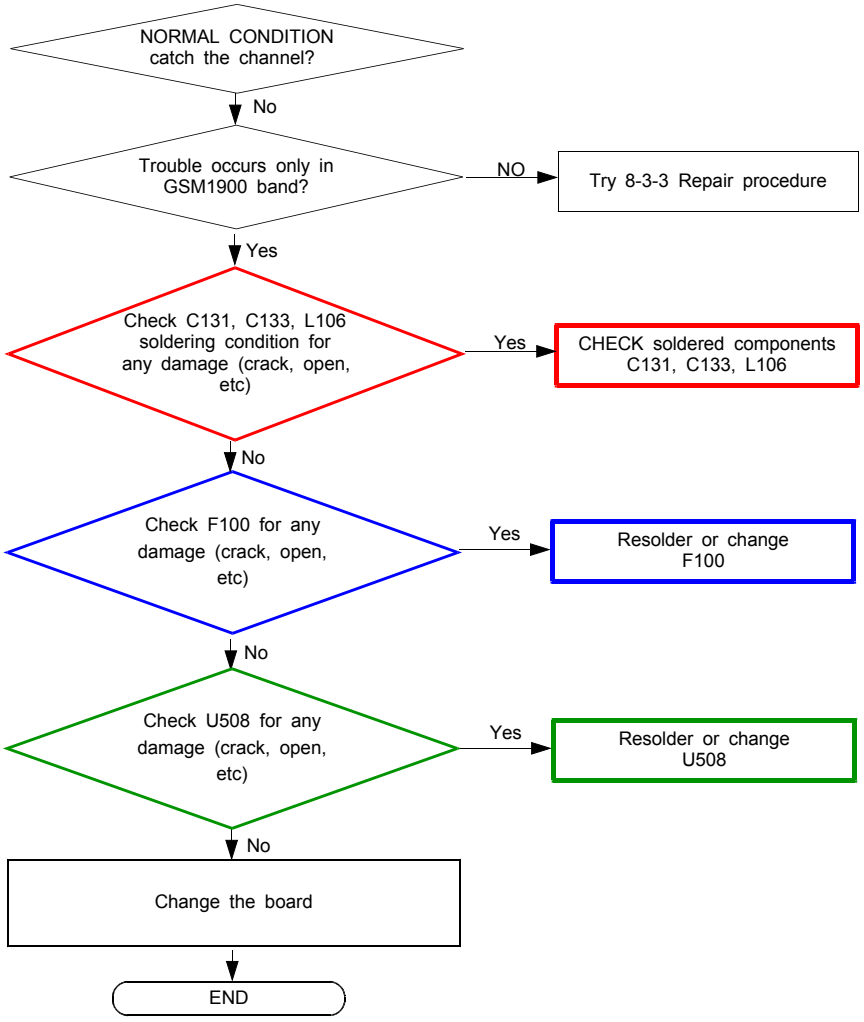
8-3-16. GSM1900 RX



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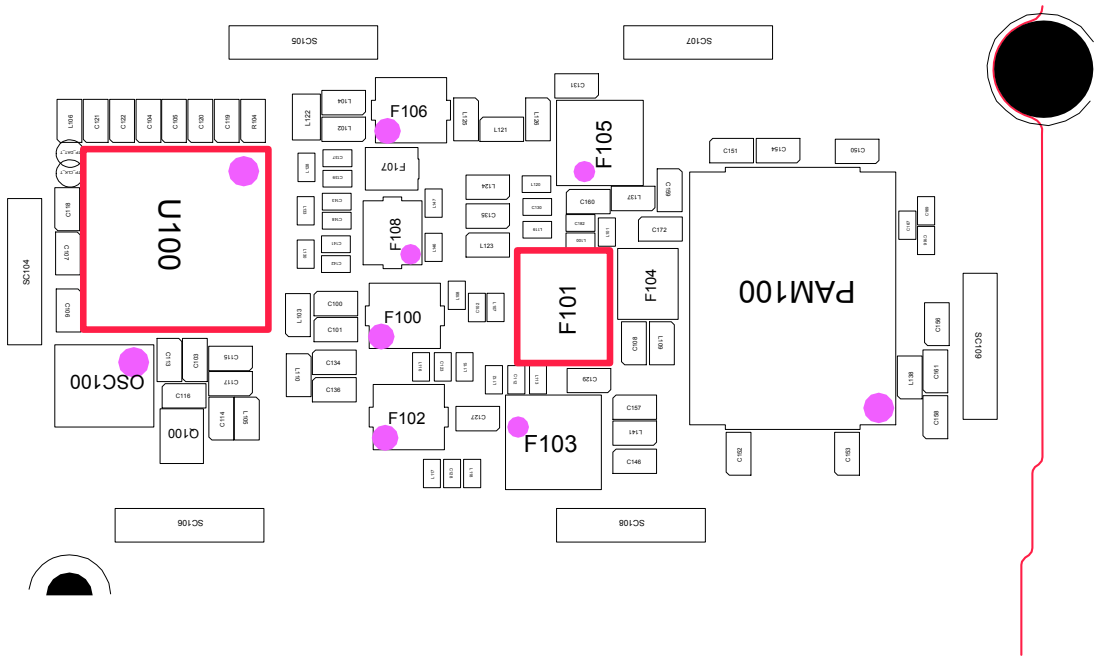

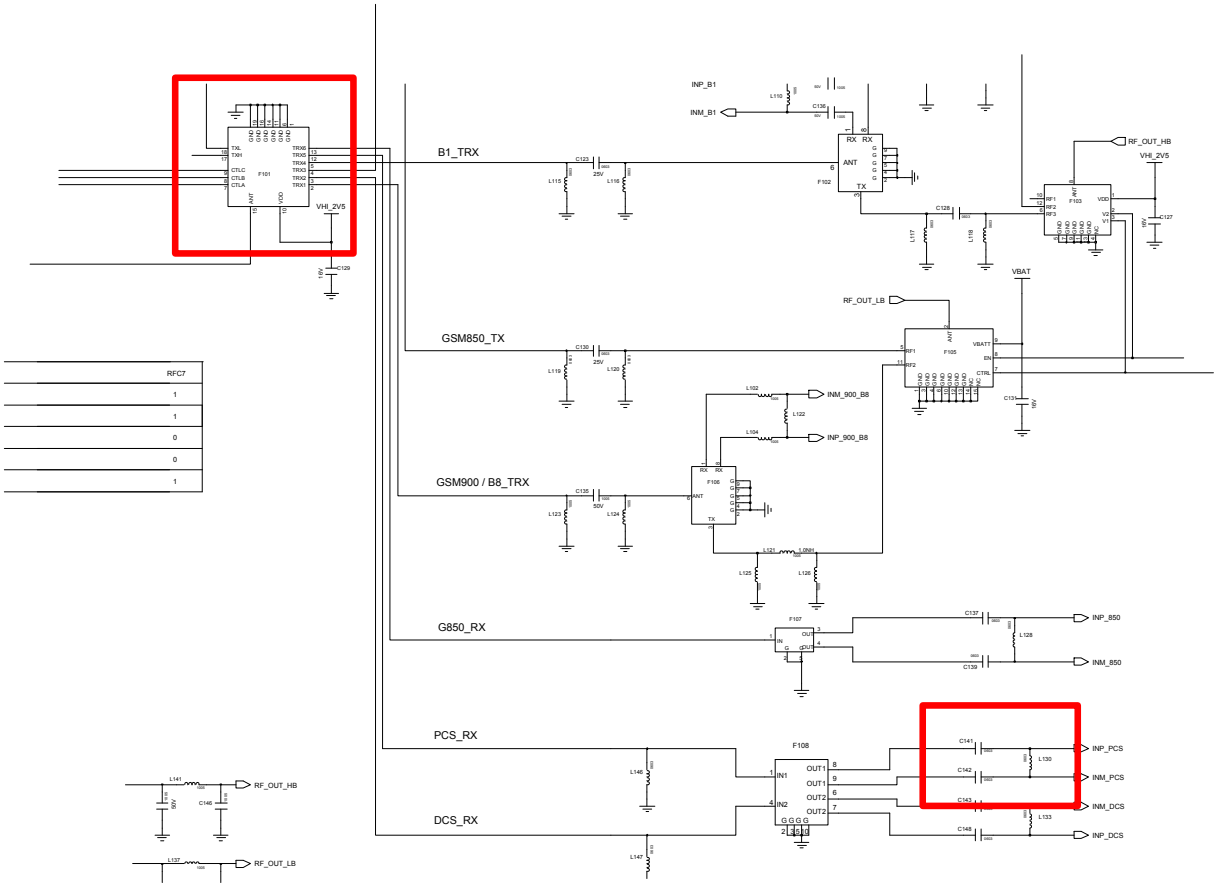

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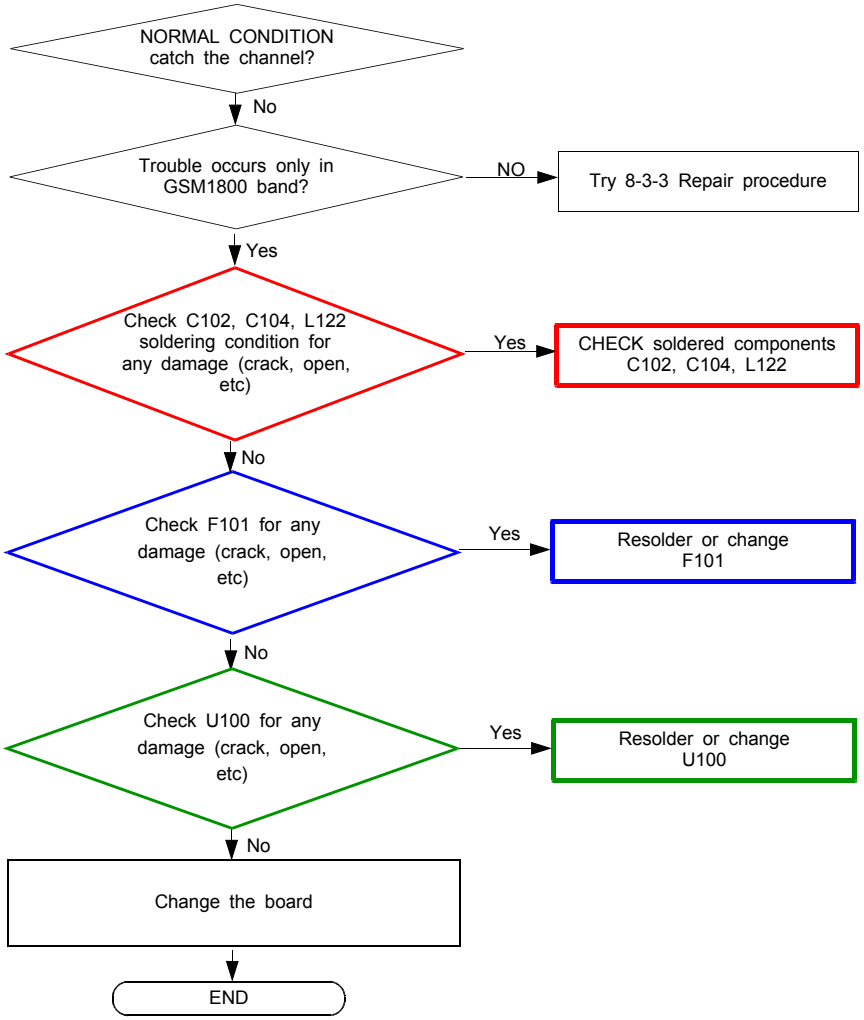
8-3-15. GSM900, Band8 RX



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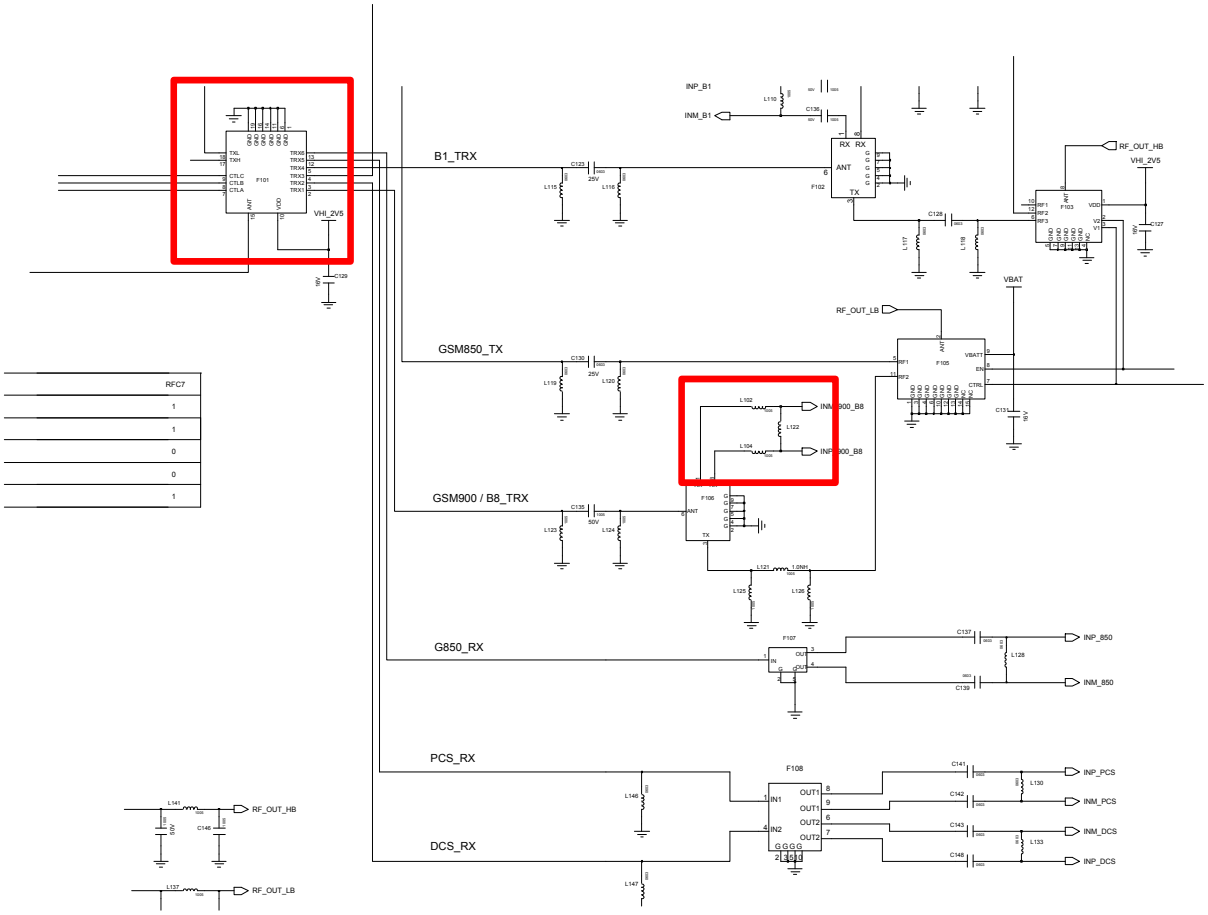

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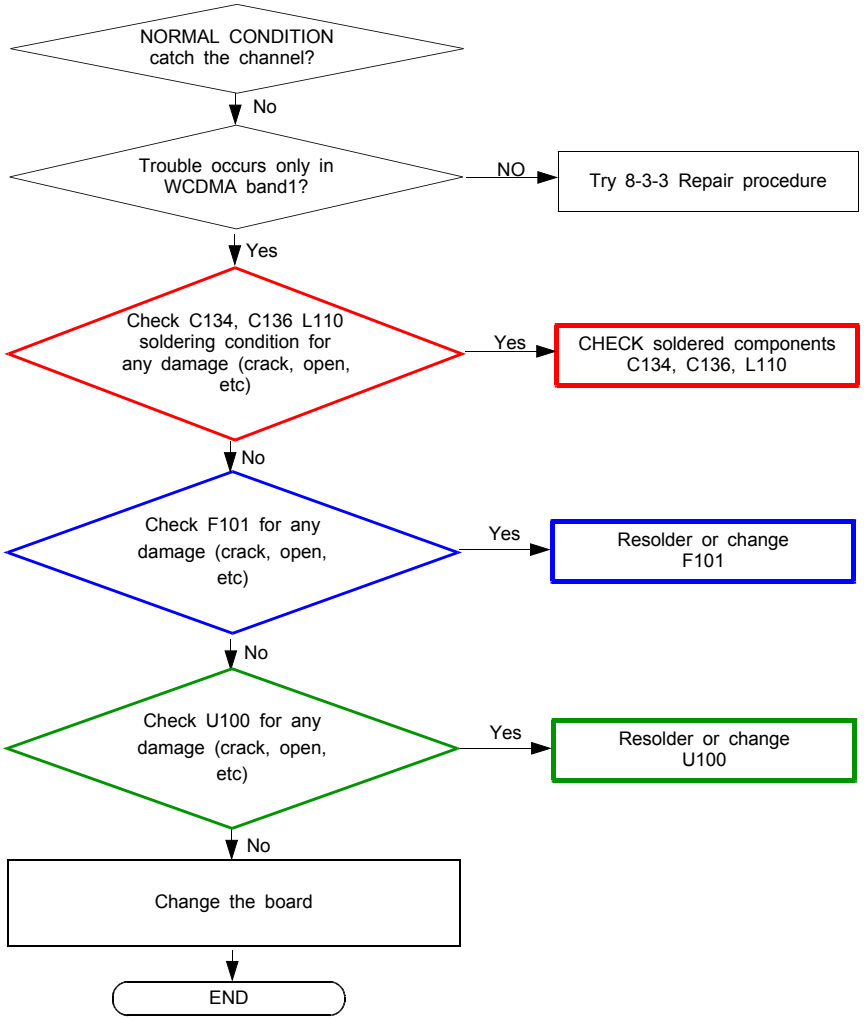
8-3-17. WCDMA Band1 RX



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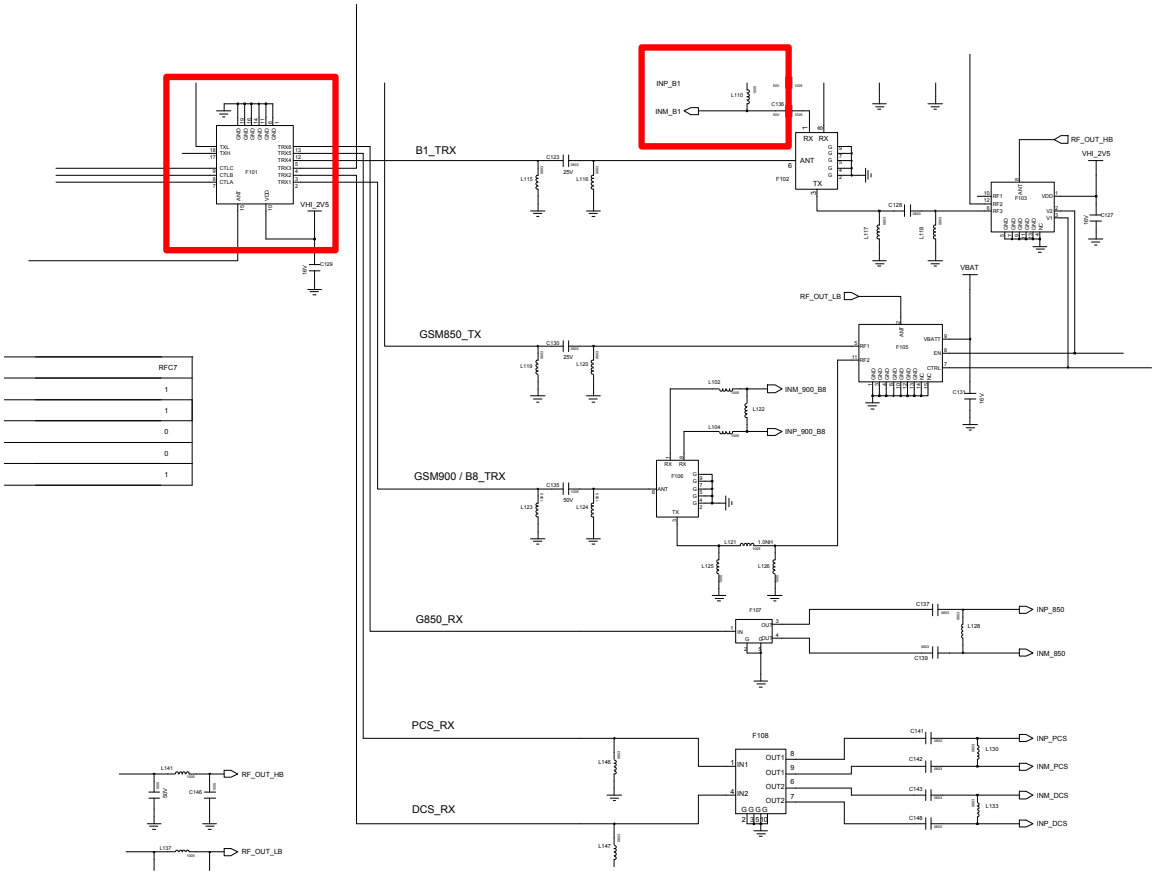

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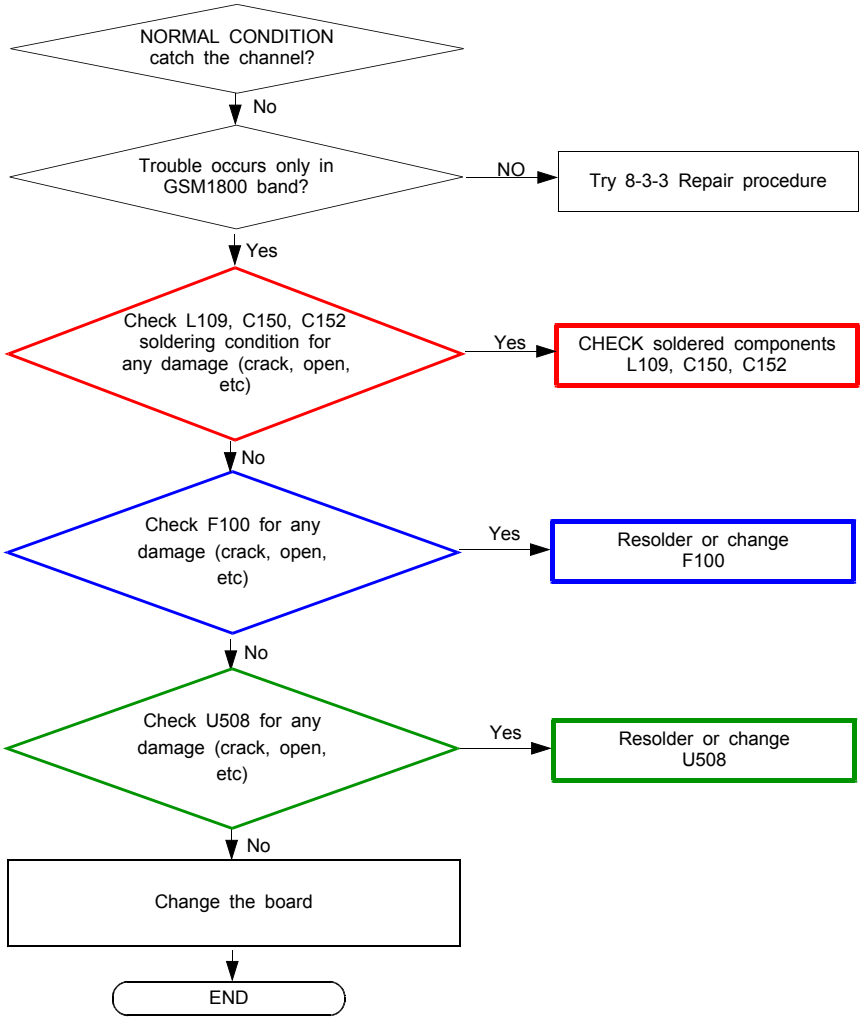
8-3-20. WCMDA BAND8/GSM850/GSM900 TX



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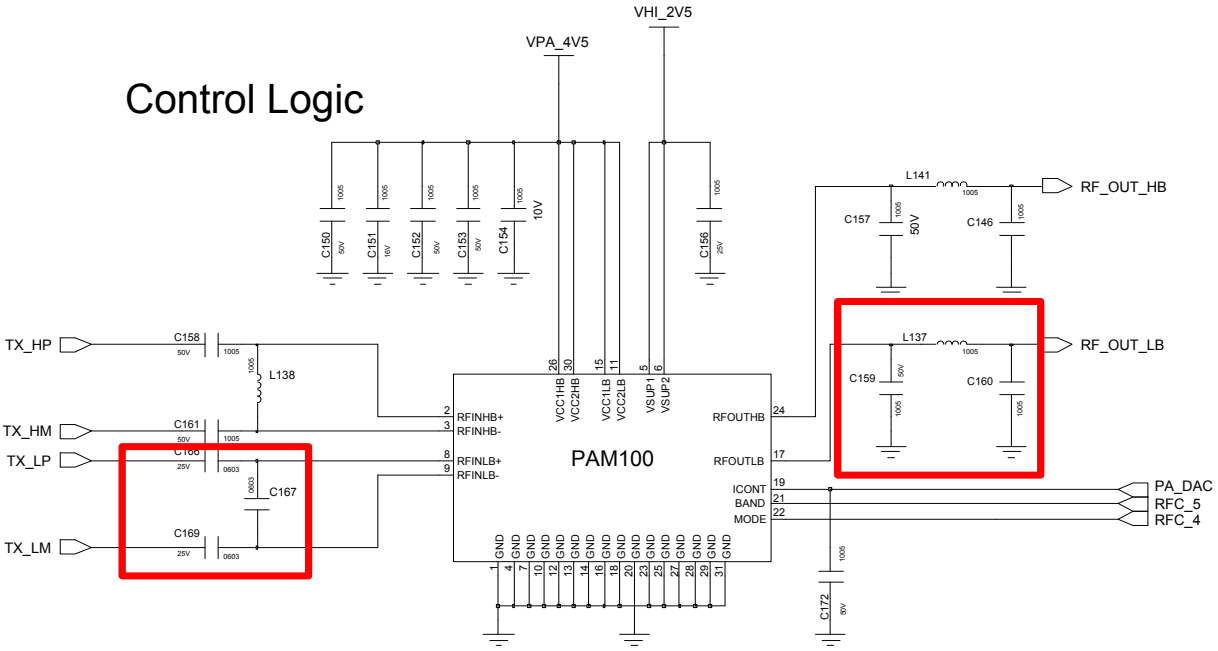

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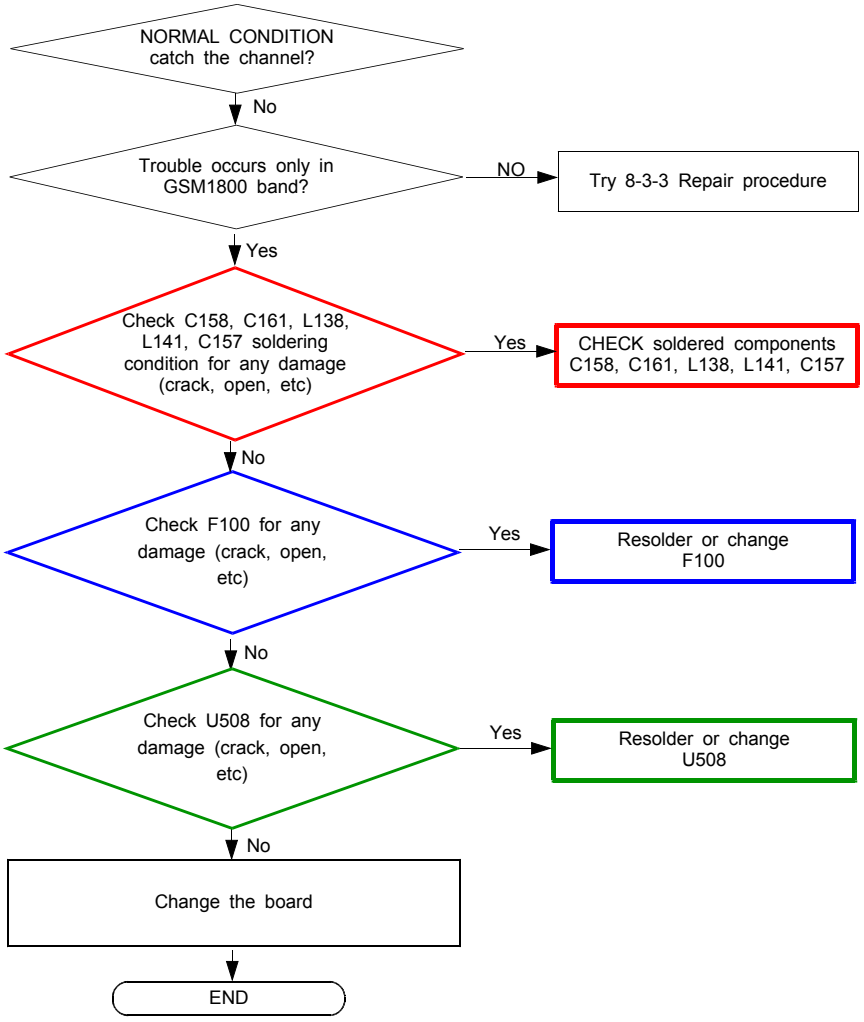
8-3-21. WCDMA BAND1,BAND2/DCS/PCS TX



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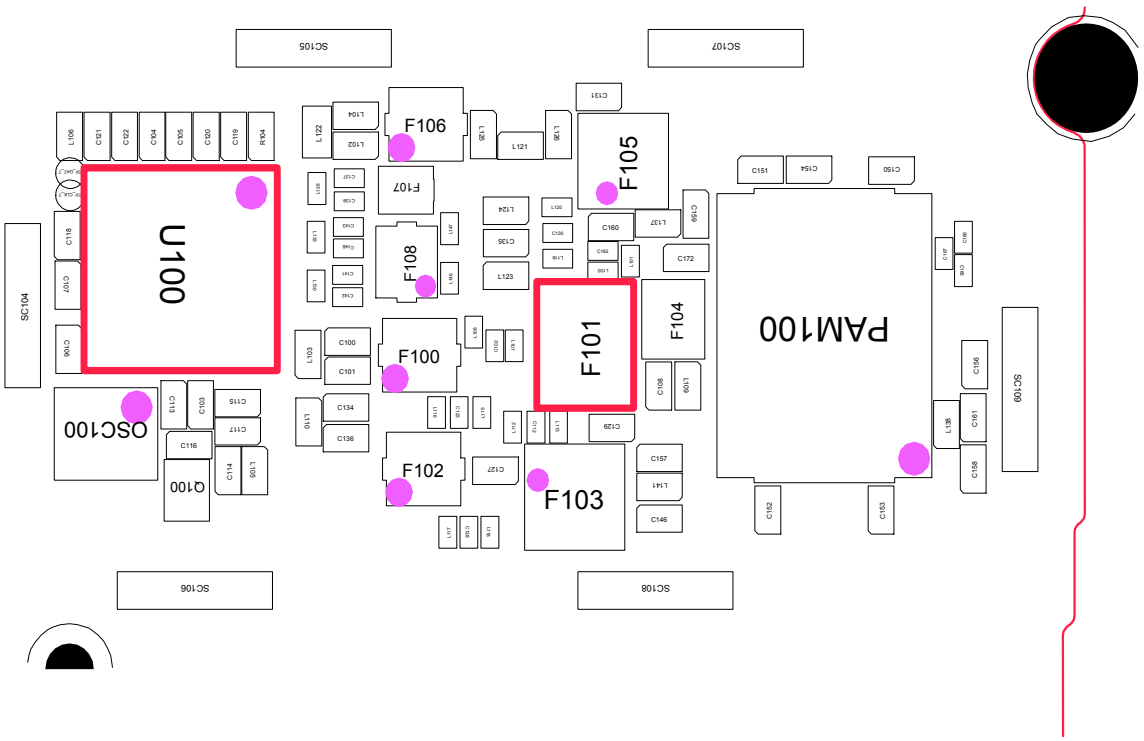

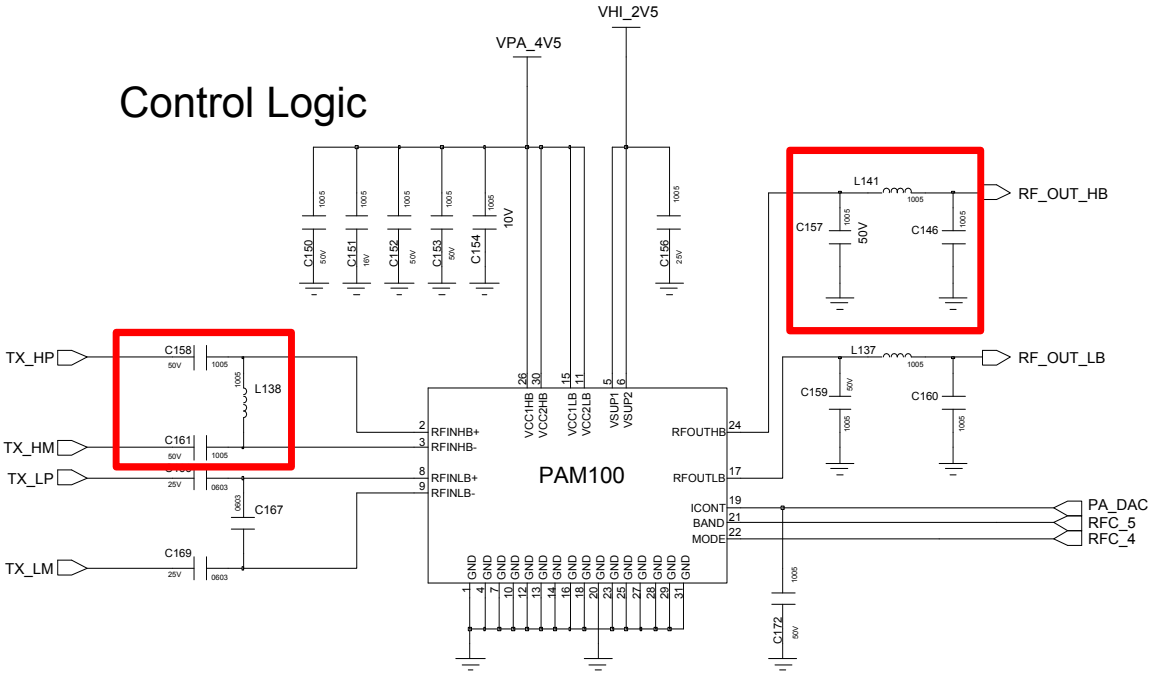

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